Chemical Marketing Reporter

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THE MARKETS

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CHEMICAL MARKETING REPORTER's market index of chemicals and related materials (100=1974 average), based on 97 key commercial chemicals, appears alongside with data for two weeks ago, last month and last year.

Oct. 3, 1986	151.60
Sept. 26, 1986	152.04
Sept. 5, 1986	152.62
Oct. 4, 1985	152.48

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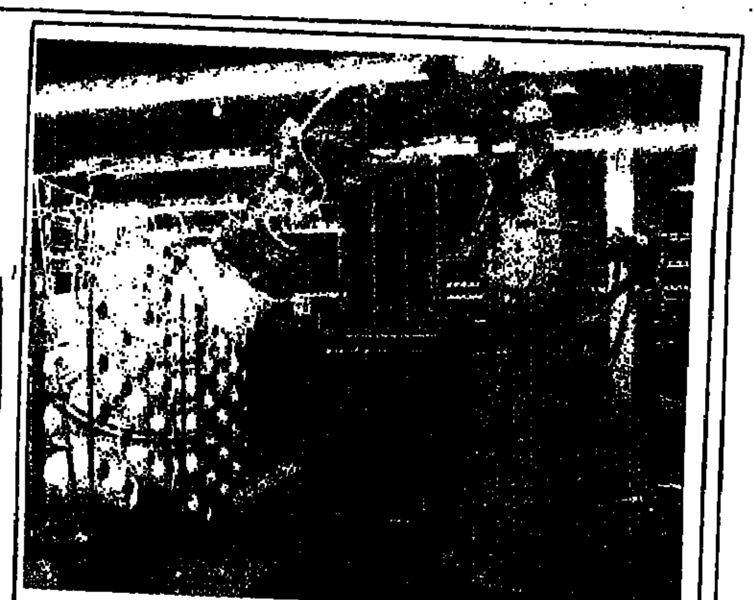
BISPHENOL-A: Polycarbonate industry boosts ship- ments..........
ADIPIC ACID: Strong 1986 growth will level fu- ture ....
UREA: Producers hope anti-dumping action helps them ....

Chemical Marketing Reporter



Capro Outlook 3

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Dinoseb Halted For All Uses

The Federal government last week ordered an immediate emergency suspension of all uses of the pesticide dinoseb because of the risks posed by exposure from field application.

"Exposure to dinoseb during or shortly after field application poses a very serious risk of birth defects to the unborn children of pregnant women, particularly if exposed during the early stages of pregnancy," said Environmental Protection Agency Administrator Lee M. Thomas in announcing the ban.

He said dinoseb exposure from field application may also pose a risk of sterility for male workers. Dietary exposure, however, does not appear to present a significant risk to the public, Mr. Thomas added.

He said the dangerous routes of exposure are inhalation and skin absorption by people who apply the pesticide, which is the active ingredient in about 180 products manufactured by 80 agricultural chemical companies. Major suppliers include Uniroyal Chemical Corporation, Hoechst AG, S.H. Marks Company Ltd., and Combinatal Chimic Fararar.

The emergency suspension is the strongest pesticide control action authorized by the Federal Insecticide, Fungicide & Rodenticide Act, and is only the third time EPA has taken a product off the market on an emergency basis.

EPA previously invoked its emergency powers to

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PESTICIDE DELIVERY: Between 7 million and 11 million pounds a year of dinoseb's active ingredient are sprayed as liquid from airplanes, tractor-drawn equipment and hand-held equipment,

Grace Cuts Corp. Staff, Sells Off Two Businesses

W.R. Grace & Co. last week cut its corporate staff and sold two non-core businesses as part of a cost-saving program and corporate restructuring initiated last December.

Grace laid off 164 members of its headquarters staff in New York City, bringing the total down to 500 from 734 at the end of last year.

The company also announced last week the sale of its Dearborn Engineering Group to Les Chantiers Modernes, a Paris-based engineering firm. The Dearborn operation consists of two firms, Killam Associates Inc. of Millburn, N.J., and Duncan, Lagnese & Associates Inc., Pittsburgh, Pa.

Grace described the Dearborn group as good in its field but peripheral to the company's mainstay specialty chemicals business.

The need to cut overhead has been prompted, Grace said, by the sale of various company businesses, as well as the downturn in the fertilizer and natural resource industries. The company said its corporate overhead next year should run at least $25 million below last year's level.

In addition to last week's layoffs, the company has offered an early retirement incentive program.

The entire overhead reduction program is expected to result in a non-recurring charge to net income of approximately $5 million, or 12 cents per share, in the fourth quarter of 1986, Grace said.

The restructuring program was initiated with the repurchase by Grace of the Flick Group's 26 percent holding in the company for $598 million. The purchase was completed in January of this year.

Since then, Grace has sold its interest in Herman's Sporting Goods for $227 million, and its Home Centers West and Orchard Supply Hardware units for $180 million.

The company expects to sell the rest of its retail group, which includes home center stores and other retail outlets. Plans to sell the bulk of the retail units to an investor group led by Citicorp, Drexel Burnham Lambert and a Grace executive recently fell through.

Grace also plans to sell its interest in Taco Villa, its fast food operation, and complete a leveraged buyout by management of its restaurant group. Under the plan, Grace would retain a 47 percent interest in the operation.

The company also plans to combine the land and inland barge drilling operations of Grace Drilling and Dixilyn-Field Drilling Company.

"It has been necessary for us to take quick and decisive action in our plan to insure a sound, long-term position for Grace," said Charles H. Erhart, Jr., the company's vice-chairman and chief administrative officer, in commenting on the various moves.

"The major restructuring steps that have been accomplished and are under way should provide a base on which the company — its shareholders and employees — can grow and prosper," Mr. Erhart said.

"We do not expect that any further major restructuring moves will be necessary for the foreseeable future, and we expect to pursue new business opportunities as aggressively as we traditionally have — through acquisition, research and development and internal growth," the Grace vice-chairman added.

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Caprolactam Sparked By Carpets, Housing

Strong demand for carpeting, sparked by an upturn in US housing starts, coupled with a thriving market for nylon resins, has pushed domestic caprolactam demand to the brink of available capacity, a condition that is expected to continue through the end of the decade.

For 1986, US caprolactam production is projected to nearly reach 1.1 billion pounds. On line US capacity is currently rated at 1.09 billion pounds, indicating that producers are running their plants full out. Indeed, Allied-Signal, BASF and Nipro all report that their facilities are running at maximum capability. Nipro, the only purely merchant supplier of the three, maintains 180-million pounds of capacity at Augusta, Ga., in reserve. A company spokesman there indicates the facility will probably be activated in the next two to three years.

INCREMENTAL EXPANSION

Allied is also taking steps to keep capacity in pace with demand. The company is continuing an incremental expansion program that has boosted nameplate from 520 million pounds to 560 million pounds since 1983. Capacity at the company's Hopwell, Va., plant will be further expanded to 600 million pounds by 1988.

BASF's plant at Freeport, Tex., formerly operated under the Badische name, is rated at 350-million-pounds-per-year, unchanged since the facility opened ten years ago. This plant had been underutilized until late last year when the company purchased the nylon fiber assets of American Enka. Now, a BASF official says the plant is running at capacity, and expansion plans are under consideration.

Caprolactam is used entirely to make nylon fiber, resins and film, and producers say the market is growing in all three sectors. The big boost, however, is coming in the fiber business, which accounts for roughly 90 percent of domestic caprolactam consumption. Here, carpeting is the big factor, accounting for roughly 75 percent of nylon fiber demand. Sources say reduced interest rates early this year sparked a boom in the housing market, and carpet demand has been swept along in the tide.

Housing starts ran 8 percent higher in the first eight months of 1986, according to Department of Commerce figures. Through August 1.274 million units were started, compared to 1.176 million units in the same 1985 period. If this year's pace continues, new home construction will top 1.9 million units by the end of the year. Last year, 1.742 million new units were started.

This surge has had a direct and positive impact on nylon fiber sales. Textile Economics Bureau, the statistical arm of the Man-Made Fiber Producers Association, reports that shipments of nylon yarn and monofilament (including exports) reached 1.05 billion pounds in the first eight months of 1986. This total is 5.6 percent greater than the 994 million pounds shipped in the comparable period of 1985. At the same time, shipments of nylon staple, tow and fiber fill have increased 5

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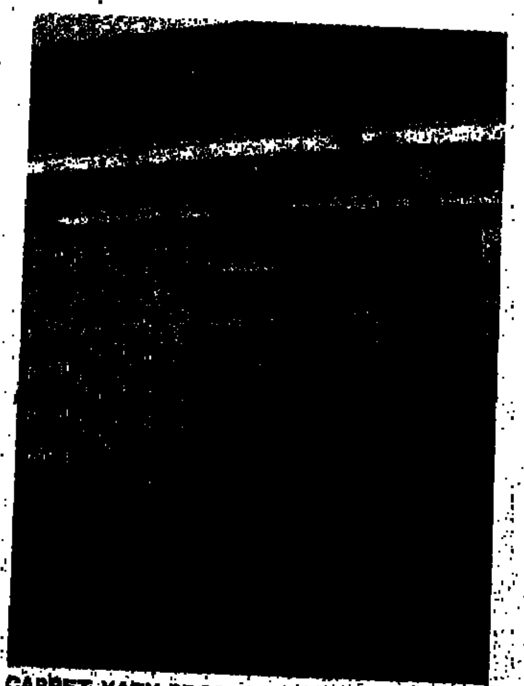

CARPET YARN PRODUCTION: American Enka. BASF recently purchased American Enka's nylon fiber assets. BASF's Freeport caprolactam capacity was previously underused. Now it's said to be running at full capacity.

General Electric, Huntsman In Polystyrene, PPO Venture

General Electric Company and Huntsman Chemical Company plan to form a joint venture to produce polystyrene (PS) and polyphenylene oxide (PPO), spokesman for both companies announced last week.

The new $60-million venture, to be called General Electric-Huntsman Corporation, should be established by November 15, 1986, pending government approval.

Using Huntsman's polystyrene technology, the corporation will produce high-impact PS, as well as PPO; all PPO and much of the PS to be produced will be sold to G.E. for use in its "Noryl" PS-PPO blend, used in electronics, industrial and other applications. Remaining PS will be used to develop new products to be marketed by Huntsman.

The new venture will give G.E. the next best thing to a captive PS source; until this point, the firm had bought all its polystyrene from other producers.

Production will be based in Selkirk, N.Y., where the new corporation will resume construction of G.E.'s "Noryl" PS-PPO compounding plant. G.E. started building this plant in 1983, when the company announced expansion of its "Noryl" line in response to increased demand for the resin blend by the computer and business machine market. In 1984, profitability in these market segments fell sharply, a G.E. spokeswoman explains, and the firm halted construction later that year. The facility was to have included high impact polystyrene production capacity, and make G.E. self-sufficient in the resin.

An independent market source explains that G.E. had actually failed to develop an appropriate quality PS for use in "Noryl." Huntsman's PS expertise will allow the company to expand its range of "noryl" blend and alloy products.

The two companies plan to have the Selkirk facility on line by the first quarter of 1988. Neither G.E. nor Huntsman would disclose its capacity, but the independent source believes it will be "fairly substantial — well in excess of 20 million pounds per year."

The new corporation's board of directors will be composed of an equal number of G.E. and Huntsman executives. Glen H. Hiner, senior vice-president and group executive of General Electric, will serve as chairman.

Captive Shippers, Say ICC Backs Off Commitment

With the threat of Congressional action over this year, the Interstate Commerce Commission (ICC) has retreated substantially from its earlier proposal to revise standards for assessing financial health of railroads — a key factor in regulating rates where competitive shipping markets don't exist, an electric utility industry spokesman charges. Thomas R. Kuhn, executive vice-president of the Edison Electric Institute, says, "Over the past two years, support has grown for legislation to ensure that the ICC's regulatory practices are fair to captive shipppers. With immediate Congressional action now unlikely, the ICC has once again failed to reform its practices."

In February 1986, ICC chairman Heather Gradison told Congress that the "existing standards and procedures for determining revenue adequacy [are] not producing a realistic picture of the financial condition of the rail industry," but recommended that "the question be addressed through the administrative process rather than legislation."

In June, the ICC proposed to make many of the changes recommended by shippers. The recent ICC action retreats in many substantial aspects from that proposal, says Mr. Kuhn.

"Shippers are distressed that, absent the threat of Congressional action, the ICC action, the ICC has failed to bring about constructive change. We agreed that the previous test did not produce a realistic assessment, but the new test will not reflect reality either," he adds.

A coalition of more than 2,000 large and small shippers dependent upon the railroad industry for transportation services, including chemical and fertilizer companies urged the ICC to revise the revenue adequacy test.

Sulfuric Plant Sold To Avtex Fibers

Avtex Fibers will purchase General Chemicals sulfuric acid facility at Front Royal, Va. The acid plant has been operated by General Chemical and its predecessor company (Allied Chemical) as a dedicated supply for Avtex's rayon production. The plant is rated at 145,000 metric tons.

"This is an important step in our long-range strategy," an Avtex spokesman says. "Our relationship with General Chemical has been excellent over many years; however, this is an opportunity to significantly improve the Front Royal raw material cost position. The sulfuric acid market has gone through major changes, and this will give Avtex maximum flexibility to take advantage of those changes over the long term."

Avtex says it anticipates using the majority of the plant's capacity as rayon demand is very strong now. Avtex Front Royal's annual viscose capacity is about 200 million pounds. It produces rayon staple products for nonwovens, home furnishings and apparel, as well as rayon filament yarn for automotive, industrials and carbon yarn for aerospace. The complex also produces polypropylene fine denier staple for nonwoven thermalbonding.

Basil Vassiliou, who has been named vice-president of Rohm and Haas Company. Mr. Vassiliou has been with Rohm and Haas for over 25 years. He was elected director of the European region in 1985 and will retain that position.

Polyethylene Hike Completed by Allied

Allied Corporation announced today the expansion of its Baton Rouge, La. high density polyethylene plant capacity.

The expansion, already under construction, involves the debottlenecking of the polymerization area and related peripheral equipment along with the addition of a new densification line. According to Donald J. Bonin, vice-president and general manager for HDPE, the project will be completed in January of 1987, adding 120 million pounds of new capacity to the facility and bringing Allied's total HDPE capacity to 1.025 billion pounds annually, for an increase of 13 percent.

A company spokesperson says that the upgrading and expansion of the HDPE facility reflects Allied's continued commitment to the growth of the industry

Vitamin E to Battle Nitrosamine Threat

Starting Nov. 6, Department of Agriculture says it will allow bacon processors to apply vitamin E (alpha-tocopheral) to the surface of bacon to prevent nitrosamine formation.

"USDA approved vitamin E last year for injecting or 'pumping' into pork bellies during bacon production," said Donald L. Houston, administrator of USDA's Food Safety and Inspection Service.

"At the same time, USDA solicited available information on the suitability of topical use of vitamin E during the production process. Data submitted show that surface applications of vitamin E — dipping, spraying and brushing — are functional and suitable, so we are now approving that method for pump-cured bacon, which is the most common type produced."

Alpha-tocopherol is said to be effective in preventing the formation of nitrosamine compounds in bacon. Nitrosamines form at high frying temperatures when nitrite from sodium nitrite, which is used in the curing process to prevent the growth of organisms that cause botulism, combines with naturally occurring amines in the meat.

Warner-Lambert Sets Drug Delivery Product

Warner-Lambert Company's Parke-Davis is marketing "Nitrogard" a new prescription nitroglycerin delivery system for the treatment and prevention of angina pectoris due to coronary artery disease.

"Nitrogard," which was developed to overcome the limitations of other nitrate delivery systems, is nitroglycerin in controlled-release tablet form designed for oral, transmucosal administration. The nitroglycerin is impregnated into a special matrix of cellulose-like fibers.

The company says the product provides major therapeutic advantaes over other oral nitroglycerin forms, including an onset of action that is faster than any other prophylactic nitrate (equivalent to sublingual nitroglycerin) and a duration of action up to five hours.

A&W Names Paul; Livingston to Retire

Robin C. Paul has been named deputy chairman and managing director of Albright & Wilson Limited, London, a wholly owned subsidiary of Tenneco Inc. Mr. Paul will succeed David W. Livingstone, who is retiring after 37 years with the company. Mr. Paul's appointment is effective November 1, 1986.

Mr. Paul was previously at Imperial Chemical Industries plc., where he was deputy chairman, ICI Mond Division responsible for chlorine and derivatives business, production, engineering and personnel functions. He joined ICI in 1959 and, following a series of assignments of increasing responsibility, was appointed to the position of deputy chairman in 1979.

Rollins Wins Decision

Rollins Environmental Services Inc. has been cleared of all but two of the 43 alleged violations at its toxic waste plant in Baton Rouge, La. State officials sought to close the plant after a malfunction there in August 1985 that sent up a plume of black smoke. The state reportedly plans to appeal the hearing officer's ruling last week.

Atochem and Toray In Plastics Accord

Atochem S.A. of France and Toray of Japan say they will expand their cooperation in the field of engineering plastics.

Toray has been Atochem's partner since 1981 for the development and sales in Japan of "Rilsan" nylons 11 and 12. The two have decided to enlarge the Japanese venture to include the range of "Pebax" polyether block amides developed by Atochem and first launched in 1981. These thermoplastic elastomers complement Atochem's range of high number nylons. They are used in flexible elastomeric applications and can be readily converted by all typical thermoplastic processing techniques. "Pebax" is also used as a base polymer for various alloys.

"Pebax" grades are used in covering fields from automotive through sporting goods to electrical equipment.

"Pebax" and "Rilsan" nylons 11 and 12 are marketed in the U.S.A. by the Polymers Division of Atochem Inc. The products are produced in the compan's plant located in Birdsboro, Pennsylvania.

UCC, GAF Sign Pact On Acetylene, Stock

Union Carbide Corporation and GAF Corporation have announced the signing of two long-term agreements providing for the sale of acetylene by Union Carbide to GAF. The acetylene to be supplied by Union Carbide is used as a primary feedstock at GAF's chemicals plants in Texas City and Seadrift, Texas.

The sales will commence after the expiration in 1988 and 1990 of existing contracts between the two companies. The companies also say that in order to provide for a constructive and mutually beneficial future commercial relationship between Union Carbide and GAF, they signed a separate ten-year agreement that provides among other things that GAF will not purchase additional shares of Union Carbide. GAF and its affiliates currently hold 9,684,561 shares of Union Carbide's common stock.

Schenectady Starts

Schenectady Chemicals, Inc. says it has successfully started up a new di-alkylphenol plant at Freeport, Tex. This 30-million-pound-per-year unit complements two existing mono-alkylphenol units already at Schenectady's Freeport facility. Schenectady also operates a mono-alkylphenol plant at Rotterdam Junction, N.Y., and is the largest merchant producer of alkylphenols in the world.

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Palm Oil Firm Goes Private

The West African Republic of Togo is seeking investors to take over its state-owned palm kernel and cottonseed oil industry.

The industry processes domestically produced palm kernels and cottonseeds. Current capacity of 20,000 tons of seeds could be doubled, and optimum profitability could be achieved, according to a recent study, on production of: 5,892 tons of palm kernel oil; 10,000 tons of cottonseed oil; and 15,000 tons of cottonseed meal.

The Togolese government is considering all reasonable bids for the purchase or lease of the industry. Successful operation would require an investment of approximately $5 million to improve the plant's performance. Another $3 million would finance the purchase and addition of an edible cotton seed refinery for domestic consumption.

The plant laboratory detects impurities, moisture, fat, acidity, percentage of lint for cottonseed oil, density, percentages of water and traces of soap as part of its quality-control capability.

Cottonseed oil produced at the plant is half refined, with a good final product acidity of .05 percent. Additional refining, decoloration and deodorizing is necessary for export to developed countries. Palm and cottonseed oil are shipped directly to the nearby Lome port via pipeline.

During the six-month off-season, the plant produces unrefined palm kernel oil with less than 6 percent acidity for use in soaps and cosmetics. At the right price, the oil could attract serious export opportunities.

The industry is available on a long-term lease or purchase-of-assets basis, and capitalization requirements would be low for investors with the right technical and marketing skills, according to Koffi Djondo, Minister of State Industries.

Located in the capital, Lome, the plant is one of several facilities in Togo for sale.

Ciba-Geigy, Chiron Plan New Vaccine Joint Venture

Chiron Corporation, Emeryville, Calif., and Ciba-Geigy Ltd., plan to form a 50-50 joint venture for the development and commercialization of a new generation of genetically engineered vaccines.

The venture will focus on vaccines for a wide range of infectious diseases that strike adults, including vaccines for AIDS, oral and genital herpes, hepatitis A, hepatitis non-A, non-B, and malaria.

"Vaccines against these adult diseases represent a growing commercial opportunity for Chiron," says William J. Rutter, chairman. Mr. Rutter noted that the traditional vaccine market has been limited mainly to childhood diseases, with vaccines given away to public health agencies for mass immunization programs.

"Our joint venture with Ciba-Geigy, one of the world's premiere pharmaceutical companies, is a major step forward in our expanding program to commercialize a new generation of synthetic vaccines that are safe, highly immunogenic and with fewer side effects than conventionally produced vaccines," Mr. Rutter said. "It builds on the momentum we have established with our successful work on the recently approved vaccine against hepatitis B."

Max Wilhelm, director of international research and development in the pharmaceuticals division of Ciba-Geigy, says, "We have been considering entering the field of prophylactic health care for some time. The new generation of vaccines that Chiron's technology has initiated is the opportunity that we have been looking for. Our experience and patented know-how in the area of chemically defined immunomodulators will now be applied to making adjuvants for the new vaccines."

Chiron is pioneering the production of genetically engineered vaccines which are free of many of the problems that have limited the acceptance of conventionally produced vaccines. The new tools of biotechnology eliminate the use of live, infectious agents in the production process, thereby totally eliminating the possibility of causing the diseases they seek to prevent.

By circumventing the need for complex purification of blood or other traditional virus sources, a genetically engineered vaccine is less likely to carry stray harmful or disease-causing agents.

Dicofol Diazinon Moves Praised by Environmentalists

Environmental Protection Agency's decision to ban dicofol and partially ban diazinon represents "an important step toward protection of America's wildlife," says the National Wildlife Federation (NWF).

"The US Fish and Wildlife Service has found that the pesticide dicofol jeopardizes West Coast populations of peregrine falcons," says NFW executive vice president Jay D. Hair.

"By banning dicofol, EPA has increased their chances of survival," he adds. Manufactured from the banned pesticide DDT, dicofol contains DDT residues that are called "unavoidable contaminants."

In addition, EPA recently decided to ban the use of the pesticide diazinon on golf courses and sod farms. Mr. Hair notes that diazinon has been linked to at least 60 incidents of mass poisonings of birds in 18 states.

In May 1984, he says, 700 Atlantic brant geese were killed on a golf course on Long Island, N.Y., after they ingested turf treated with diazinon.

"Although we are concerned that this pesticide can still be used in agriculture and on home lawns, EPA deserves credit for taking this important step," says Mr. Hair.

According to EPA spokesman Al Heir, the dicofol and diazinon decisions mark the first time that EPA has banned pesticides, or a particular use of a pesticide, solely on the basis of their harmful effects on wildlife.

"This is a good day in America for the environment, and especially for the nation's wildlife. We urged EPA to take these actions, and we're pleased that they have responded," Mr. Hair remarks.

EPA imposed restrictions on dicofol in May, requiring that it contain less than 2.5 percent DDT and related compounds after June 29 and less than 0.1 percent by January 1989.

According to the agency, data supplied by the primary US registrant, Rohm and Haas Company, indicate that the company has not been able to get DDT contamination below the 2.5 percent level. Consequently, EPA has ordered the firm to halt all distribution and sale of dicofol products.

Rohm and Haas says it disagrees with some of the conclusions reached by EPA and contends it has met the 2.5 percent limit. It further argues that the additional material in the technical grade formulation that EPA considered DDT-related is actually some other substance.

The company says it intends to alter its manufacturing process to enable it to resume marketing the product.

Superfund Showdown Set Up by House Vote?

A possible veto override showdown between Congress and the White House was set up last week as the House voted 386-27 to give final congressional approval to an $8.5 billion, five-year plan to expand the superfund toxic waste cleanup program. The legislation, passed earlier by the Senate 88-8, now goes to President Reagan, whose ecomonic advisers have called for a veto because they consider it too costly and oppose some of its tax provisions. White House spokesmen say President Reagan favors the cleanup program but opposes the new taxes contained in the superfund financing package.

"The President has strong feelings about the need for responsible reauthorization" of the program, says Albert R. Brashear. "The American people don't want new taxes."

James C. Miller, director of the White House budget office, adds that the Reagan Administration "cannot accept a smorgasboard of new taxes disguised as a superfund reauthorization bill."

He advised Congress to finance superfund without the broad-based corporate tax or the new petroleum taxes contained in the current legislation, but did not suggest any alternatives for raising the money.

But defiant lawmakers say they are confident both chambers of Congress have the votes to override a presidential veto and would be willing to stay in session in order to do so.

"If the President wants to play hardball on superfund's reauthorization, then we're prepared to do so as well," says Rep. James J. Florio, (D-N.J.) "If the President plans to exercise his pocket veto option, the Congress

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Dr. Anthony Champ, who has been appointed vice-president for technology development at Celanese Advanced Technology Company.

Du Pont Backs CFC Limit; NRDC Applauds the Firm

E.I. du Pont de Nemours & Co. says it now favors a worldwide limit on the production of chlorofluorocarbons, or CFC's, the chemicals some scientists believe are responsible for the depletion of the earth's protective ozone layer.

The change in policy by Du Pont, the leading CFC producer, was praised by the Natural Resources Defense Council, a major environmental group, as "the biggest breakthrough" since the US banned the use of the chemicals as aerosal propellants in 1978.

Du Pont, the company that invented chlorofluorocarbons in the 1930's, produces the chemicals at plants in the US, Canada, Japan, Latin America and Europe. It sells, under its "Freon" trademark, 20 to 25 percent of world production which is estimated at 2.4 billion pounds per year.

In a policy statement distributed to customers, Du Pont said it believes there is no immediate threat to the ozone layer from the current use of CFC's.

But "science is not yet sufficiently developed to define with certainty a safe CFC emissions growth rate" and "we conclude that it would now be prudent to limit worldwide emissions of CFC's while science continues to work."

The company said Environmental Protection Agency should set up an advisory committee of manufacturers, users and environmental organizations to assist the State Department in international negotiations for a worldwide production cap.

Last month, the major trade group representing CFC makers and users said it now supported a "reasonable global limit on the future rate of growth of fully halogenated CFC production capacity."

The Alliance for Responsible CFC Policy also said it would back production limits, not just limits on production growth, if scientific findings justified them.

In calling for production limits, Du Pont's statement appeared to go beyhond the trade group's position. But a company spokesman said Du Pont supports the alliance proposal.

Carbide Slates a Reorganization Of Specialties and Services Units

Union Carbide Corporation says it will reorganize its Specialties & Services business units into the Chemicals & Plastics and Industrial Gases business units as part of an effort to streamline and simplify its corporate structure.

Robert D. Kennedy, president and chief executive officer of Carbide, says the decision was partly motivated by the announcement that Heinn F. Tomfohrde, president of the Specialties & Services Group, will retire at year-end.

Carbide's Medical and Industrial Services unit, including the coatings service, will be attached to the Industrial Gases group. In addition, Catalysts and Services unit, including the adsorbents and process systems units, will become part of the Specialty Chemicals Division of Chemicals & Plastics group.

Unison Transformer Services, Inc., a Carbico subsidiary, will join the Polyolefins Division of Chemicals and Plastics. The Process Materials unit will become part of the Solvents and Coatings Materials Division of Coatings & Plastics. The Process Materials business includes KTI, Inc., London Chemical Company and Nova Tran Corporation.

The Polysilicon business unit will join the Industrial Chemicals Division of Chemicals & Plastics. Another Specialties & Services unit, the Electronic Components unit was put on the selling block recently by Carbide, as part of the company's debt-reducing plan.

When the realignment is complete, Carbide will consist of three business groups: Chemicals & Plastics, Industrial Gases and Carbon Products.

Dr. Howard A. Schneiderman, who has been nominated to be a member of the National Science Board. Dr. Schneiderman is the senior vice-president of research and development and the chief scientist at Monsanto Company.

FIFRA Reform Effort Survives as Congress Delays Adjournment

The inability of Congress to meet its early October adjournment target pumped new life into the FIFRA reform effort last week as the Senate approved a bill to restructure the Federal pesticide law and extend patent terms for new products.

But with the clock running out on the 99th Congress, observers say it's uncertain whether the amendments to the Federal Insecticide, Fungicide & Rodenticide Act can be enacted because substantial differences between the Senate and House versions must be resolved before the legislation gets final congressional approval.

"We're still optimistic that we can get a bill; there's enough time," says a spokesman for the National Agricultural Chemicals Association. "But there are still some tough issues out there that must be dealt with," he adds.

The most critical issue for NACA is how the joint House-Senate conference committee resolves the question of patent term restoration.

The Senate Agriculture Committee and the full House have agreed that the patents of a pesticide product subject to regulatory review by Environmental Protection Agency should be extended for a term equal to the review period up to a maximum of five years.

But the Senate approved an amendment by Sen. Howard Metzenbaum (D-Ohio) that would limit the duration of the law's patent extension provisions to seven years.

"I don't believe in patent term extension," said Sen. Metzenbaum. "However, rather than tying up this whole bill at this late point in the session, I have agreed to go along with the extension, provided that there was a sunset provision in it."

He warned that if the sunset provision is dropped by the conference committee: "I will make every effort to defeat the entire bill. What the pesticide manufacturers are getting of this bill is unquestionably worth millions of dollars to them and will cost the consumers millions of dollars. I think we have gone far enough in the compromise that has been made."

Sen. James McClure (R-Idaho) pointed out that environmental groups promised not to block patent term restoration if the chemical industry would compromise on the FIFRA amendments.

"This sunset clause is a thinly veiled attempt to force negotiations upon industry in six years for something they had already negotiated for in good faith and should not have to revisit," said Sen. McClure.

The NACA spokesman calls the Metzen-

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Toxics Rules Face Review By Top Court

The Supreme Court opened its Fall term last week by agreeing to decide how much power Environmental Protection Agency has to force the cleanup of hazardous industrial waste under the Federal superfund law.

The justices said they will hear arguments this term in an appeal by the Reagan Administration of a lower court order prohibiting EPA officials access to the Outboard Marine Corp. at Waukegan Harbor, Ill. — the agency's top cleanup priority in the state.

The 7th US Circuit Court of Appeals ruled last year that EPA could not survey the site, take subsurface soil samples or conduct other preliminary activities for a planned $21 million dredging operation in the harbor and at the company's harborfront property.

Outboard Marine, which makes outboard motors, lawn mowers and turf care vehicles, has been blamed by EPA for deposits of polychlorinated biphenyls (PCB's) in the harbor. Numerous studies indicate that PCB's cause cancer in laboratory animals.

EPA estimates there are 1.1 million pounds of PCB's at the Waukegan site and ranks its cleanup highly on the national priority list of the nation's most hazardous waste sites.

EPA officials obtained a warrant to enter the plant site in February 1985. But the company refused to honor the warrant and eventually obtained an injunction from the appeals court denying the agency access. The court said the superfund law limits EPA's access to emergencies.

"We cannot, out of a zeal to rid our environment of its hazards, rewrite the statute for EPA," the appeals court said. "EPA needs help to accomplish its purposes, but the help it needs must be sought elsewhere."

Congress has approved superfund amend-

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Bhopal Toll Revised Upward By Indian Gov't

Indian officials last week issued a revised death toll from the gas leak at Union Carbide Corporation's Bhopal pesticide plant in December 1984.

According to new figures released Thursday (October 9) by the state government of Madhya Pradesh, 2,233 people have died from the gas leak to date. Another 338 deaths are awaiting verification as being related to the gas leak, the worst industrial accident in history.

Carbide had no immediate comment on the revised death toll last week.

Last month, the Indian government filed suit against Carbide in Bhopal, claiming the firm bears primary responsibility for the disaster. The suit seeks unspecified compensatory and punitive damages on behalf of 500,000 alleged victims of the leak.

Carbide, which was not served with a summons and complaint at its corporate headquarters in Danbury, Conn., until last Tuesday (October 7), must respond to the suit by October 30. The company has contended that the accident was caused by a disgruntled employee of the Bhopal plant.

Psoriasis Treatment Okayed

Food & Drug Administration last week approved a drug for treatment of the most severe, disfiguring forms of recalcitrant psoriasis — but warned that major birth defects can occur if a woman becomes pregnant during, or possibly within several years after, treatment with the drug.

The drug, etretinate, is chemically related to vitamin A, which itself can cause birth defects in high doses.

Hoffman-LaRoche Inc. will market the new drug as "Tegison" in capsules of 10 and 25 milligrams.

"This drug provides a treatment for people whose skin lesions are so severe that they are unable to work and, in some cases, unable even to tolerate clothing touching their skin," said FDA Commissioner Frank E. Young. The drug may allow such patients to return to useful, active lives, he noted.

"But etretinate can have serious side effects for the patient and produce such serious birth defects that it is recommended only for patients with severe or disabling forms of this disease who have not responded to or cannot tolerate other forms of treatment," Dr. Young added.

In clinical tests, a majority of patients who had not responded to other types of treatment experienced clinical improvement with etretinate. They showed a decrease in scaling and redness, as well as in the thickness of the psoriasis lesions. They also had a decrease in inflammation.

The drug was found to be effective in two forms of the disease that are the most difficult to treat: erythrodermic psoriasis,

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Allied Slates Waste Facility At Steel Mill

Allied-Signal Inc. broke ground last week for the first commercial facility to convert wastes and pollutants into usable raw materials using the company's "Aquatech" membrane technology.

The $2 million facility, to be constructed on the grounds of the Washington Steel Corporation stainless steel facility in Washington, Pa., will recycle spent pickle liquor from the stainless steel manufacturing process.

Construction is expected to be completed in about a year. Use of the Aquatech technology is expected to save Washington Steel about $1 million per year in disposal and raw material costs.

"The 'Aquatech' technology is revolutionary electrochemistry," said Michael G. Mark, Allied-Signal vice-president. "It makes good economic and environmental sense by converting potential environmental liabilities into usable assets."

The Aquatech system uses a membrane which splits water molecules into hydrogen and hydroxyl ions. When combined with monopolar membranes, the system converts aqueous salts into usable acids and bases.

"The Waste Minimization Act of 1985 has stringent waste disposal compliance standards that are affecting the economic operations of many businesses," says Joseph G. Schon, general manager of Aquatech Systems.

"Stronger EPA regulations for bulk liquid waste makes compliance increasingly difficult, forcing some landfill sites to close and dramatically increasing disposal costs," he said. "Aquatech Systems can actually convert environmental problems into economic opportunities."

Hercules Sells Its Interest In DMT Venture

Hercules Incorporated says that it has sold its 49 percent interest in Teijin-Hercules Chemical Co., a manufacturer of polyester raw material, to its partner in that venture, Teijin, Ltd., Osaka, Japan.

The terms of the transaction were not disclosed.

According to a company spokesman, Hercules product strategy has shifted away from DMT, the polyester raw material produced by Hercules-Teijin.

This policy is also reflected in the fact that Hercules in 1985 sold its interest in Hercofina's Wilmington, N.C., DMT plant to the American Hoechst Corporation, as well as discontinued production of DMT in Europe.

Teijin-Hercules was formed in 1963. Included in the sales are the joint venture's three plants in Japan with a combined capacity of 275,000 tons. The output of these production units is being used predominantly by Teijin Limited as raw material for its polyester fiber, film, and resins businesses.

Crude Oil Contract Let For US Petroleum Reserve

A total of 3.7 million barrels, or nearly one out of every three barrels of crude oil added to the Strategic Petroleum Reserve in fiscal 1987, could come from US oilfields as the result of a contract awarded by the US Department of Energy to Transworld Oil USA, a Houston-based oil trader.

The contract, announced by Energy Secretary John S. Herrington, is the first ever awarded to a firm specifically to provide a long-term source of domestic crude oil for the nation's emergency oil stockpile. Previous domestic purchases for the Strategic Reserve have been spot market transactions or other, special purchase arrangements.

"Today's purchase will show that we can fill the reserve with domestic petroleum," Mr. Herrington says. "We hope that it will encourage other domestic producers to participate in any future solicitations."

Transworld will sell 10,000 barrels of oil per day to the Reserve beginning November 1. The firm's one-year contract will be based on a bid price of $14.95 per barrel that will be adjusted each time a shipment of oil is delivered. The price adjustments will track changes in several U.S. crude and fuel oils, ensuring that the government's purchase price remains in line with market trends.

Transworld has also proposed a subcontracting arrangement under which at least 20 percent of the oil would come from small producers.

The 10,000 barrels per day is nearly one third of the 35,000 barrel-per-day minimum fill rate for fiscal 1987.

Transworld's offer of $14.95 per barrel was the lowest responsive bid. The other bids either were judged to be unreasonably high compared to prevailing oil prices or did not otherwise satisfy the requirements of the invitation for bids. Under the contract, Transworld will transport West Texas sour crude oil by pipeline to the Sun Terminal near Nederland, Texas. From that point, the oil will be piped to the nearby West Hackberry, Louisiana, storage site, one of five oil storage complexes in the strategic reserve system.

In a related action, Secretary Herrington also announced that DOE has begun pumping 8000 barrels per day of crude oil in a test transfer from its Elk Hills Naval Petroleum Reserve into the Four Corners pipeline for shipment to the petroleum reserve.

News Capsule

Arco, Carbide Team Up

Arco Technology Inc., a unit of Arco Chemical Company, and Union Carbide Corporation say they will license an improved process to produce methyl tertiary butyl ether. The process combines Arco's catalytic MTBE unit with Carbide's proprietary molecular sieve methanol recovery system.

USX Sells Lands

USX Corporation's US Diversified Group has sold land containing phosphate rock reserves in Central Florida to Agrico Chemical Company, a subsidiary of The Williams Companies, Tulsa, Okla. The reserves are located in Hardee and Manatee counties. The sale does not affect the operation or reserves of the Rockland Mine of US Agri-Chemicals, a division of US Diversified Group.

Liquid Air Advance

Liquid Air Corporation says it can now produce VLSI grade oxygen of 99.9999 percent purity in tonnage quantities. Alphagaz, the specialty gases division of Liquid Air, offers the ultra high-purity oxygen under the "UltraOx" name. The product is required in the production of semiconductor VLSI circuits, in research and in aerospace.

Beta-Carotene Offering

Cyanotech Corporation, Woodinville, Wash., is offering an all natural beta-carotene derived from algae. The company notes that solvents such as hexane, which are commonly used for preparation of synthetic beta-carotene, have been banned in Japan and are under scrutiny in the US.

BTL Gets GE Resin

BTL Industries of Burlington, Ontario announced that its subsidiary, BTL Specialty Resins Corporation of Warren, N.J., has acquired an exclusive license to General Electric's line of methylon resins in North America. BTL Specialty Resins will manufacture, market, sell and export the methylon resins. Until BTL completes arrangements for productin, General Electric will continue production at its Pittsfield, Mass. plant.

Fluor Sells Drilling Unit

Fluor Corporation has agreed to sell its offshore drilling operation Fluor Drilling Services Inc., to Ocean Drilling and Exploration Company for $17.5 million. Fluor says the sale is part of its restructuring program. The company had previously disposed of Odeco, and is now completely out of the drilling business.

Pharmacia Buys LKB

Pharmacia AB has reportedly agreed to acquire a majority equity stake in LKB Produkter AB for the equivalent of $114.1 million, and is seeking to buy LKB's remaining shares outstanding for $73.4 million. The two Swedish companies ae Europe's leading producers of separation and purification products. The deal gives Pharmacia a 40 percent share of the estimated $560 million annual world market in those products.

Stearns Wins Contract

Stearns Catalytic World Corporation was awarded a contract by the US Army Corps of Engineers to operate and maintain a chemical weapons demilitarization plant on Johnston Atoll in the Pacific Oean. Stearns is currently managing the equipment installation contract in support of the program. The operation is scheduled to be completed in 1992.

Raymark Restructure

Raymark Corporation announced a restructuring plan designed to protect itself from tens of thousands of asbestos-related liability suits. Raymark was a leading producer of brake and transmission products that contained asbestos. Shareholders approved the creation of a new company, Raytech Corporation. The new company will raise money to purchase the Raymark assets unrelated to the asbestos liability claims.

B. Clare Harris, who has been elected vice-president of Monsanto Company. Mr. Harris will retain his position as corporate treasurer which he has held since June, 1985.

Vanillin Shift: Monsanto Unit Makes R-P No. 1

The sale of Monsanto's vanillin business to Rhone-Poulenc lifts Rhone-Poulenc into the number one position as worldwide producer of vanillin. The acquisition of the Seattle plant, where all employees are expected to be kept on, will enable Rhone-Poulenc to become more versatile, in terms of product offerings and proximity to buyers.

"We've made the acquisition to gain flexibility in both the pharmaceuticals and flavorings markets," says a Rhone-Poulenc spokesman. Prior to the purchase, Rhone-Poulenc brought in guaiacol-based vanillin from its Lyons, facility in France and refined it into ethyl vanillin in Freeport, Tex. Now, it can supply lignin-based vanillin as well. The spokesman says import levels won't be affected but that Rhone-Poulenc will focus on manufacturing.

Ontario Paper, now the number two producer, does not anticipate any negative effects from the Monsanto sale. "We are disappointed that we are no longer number one," said a spokesman, "but we won't lose any market share."

An importer, however, speculates that Rhone-Poulenc may branch out even further and begin production of guaiacol-based

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Du Pont Finishes Shell Acquisition In Crop Protection

E. I. du Pont de Nemours & Co. has completed its acquisition of the US assets of Shell Agricultural Chemical Company. Terms were not disclosed.

The transaction "broadens and strengthens Du Pont's position in the US crop protection industry, particularly in the corn herbicide and insecticide markets," according to Dale E. Wolf, Du Pont's group vice-president for agricultural products.

Shell products added to Du Pont's crop protection line include "Bladex" herbicide for corn and "Pydrin" and "Asana" pyrethroid insecticides for cotton and a variety of other crops. These complement Du Pont's positions in the soybean, wheat, fruit and vegetable and industrial weed control markets.

Approximately 600 Shell employees have accepted employment with Du Pont. About 100 are expected to relocate to Du Pont agricultural products facilities in Delaware.

Manufacturing facilities in El Paso, Ill., and Mobile, Ala., were also included in the acquisition.

Icahn Is Proposing Acquisition of USX

Carl Icahn, the aggressive financier who last year forced a massive restructuring on Phillips Petroleum Company and recently won a battle to take over Trans World Airlines, last week made an offer to USX Corporation (formerly United States Steel Corporation) to acquire the diversified steel and petroleum company for $31 per share, or a total of $7.19 billion.

USX, which knew a takeover proposal was coming — if not from Mr. Icahn than from several other raiders who had accumulated poisitons in the company — said that it would evaluate the Icahn bid.

A month earlier, when Mr. Icahn disclosed a 9.8 percent holding in USX and it was learned that an Australian investor also had been buying heavily into the company, management of USX launched a thirty-day study to determine what restructuring steps should be taken.

Specifically, USX placed its big chemicals division on the block. With about $1.24 billion of annual sales, the USX chemical operation includes major capacities for polypropylene, phenol, bisphenol A, acetone, cumene, agricultural chemicals, polyesters and mioneral acids.

Theodore Semagren, chemical analyst at the Shearson Lehman Securities division of American Express Company, notes that USX has world-scale capacities in polypropylene and several basic commodity chemicals. Most of these chemicals, after having been in long supply throughout this decade, are now begining to tighten. As a result, the USX operation is more attractive and saleable — especially to companies already in the business — than it has been at any time in the recent past, Mr. Semgren said.

In addition to or in place of asset sales, restructuring steps to be taken by US Steel could include retirement of a substantial portion of equity and replacing it with debt. This step, taken by Phillips in its successful fight against an Icahn takeover, gains stockholder support by maximizing the value of their investment in the company. The shares are purchased at a price at least equal to the highest offer by the raider. Union Carbide Corporation and Unocal Corporation also successfully defended themselves against raids by massive share buybacks.

Other possible steps include large-scale purchases of stock by company employees and distribution to stockholders of proceeds from the sale of assets.

USX also could look for a friendlier acquirer, a role the company itself played five

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Glaxo Slates R&D Cab

Glaxo Inc. says it will build a $2.5 million research facility on the campus of the University of North Carolina at Chapel Hill N.C.

Glaxo's chief executive officer, Joseph J. Ruvane Jr., and Christopher C. Fordham III, chancellor of the university says the arrangement provides important benefits for both Glaxo and the university.

Under the agreement, Glaxo will build a 16,000-square-foot biological research building as part of the medical complex on the Chapel Hill campus. Glaxo scientists will work with the university's faculty and students and will hold adjunct faculty appointments. The facility eventually will be turned over entirely to the university.

"Glaxo is committed to creating an outstanding research team based in North Carolina that can begin developing new medicines," says Mr. Ruvane. "This innovative partnership with the university allows us to begin resembling our team of research scientists even while we build our own research center."

"The university is equally pleased," Mr. Fordham says. "This collaboration between two distinguished groups of scientists will enhance this important North Carolina industry, benefit the university medical school and enable both to better serve society."

Stuart Bondurant, M.D., dean of the medical school, called the agreement a pioneering relationship. He said, "This linkage will contribute to the economy of our state."

Eastman Kodak Enters Accord With Biotechnology Partner

Eastman Kodak Company has entered into a production agreement with Advanced Genetic Sciences Inc., Oakland, Calif., for the commercial production of "Snomax," a snow and ice inducer.

AGS says the product has been used successfully for the past three years at selected ski resorts across the country. "Snomax" enables production of drier, higher quality snow and more snow for the same water input, the company says.

According to Douglas Sarojak, director of marketing and product development for AGS, the potential market for "Snomax" at ski resorts in the US alone is $30 to $40 million annually. The potential market worldwide is between $60 to $70 million.

The agreement with Kodak will provide AGS with greater production capability, leading to expanded use of the product by resort operators AGS says. The agreement states that Kodak will produce 5,500 kilograms of "Snomax" for the 1986-87 ski season. Additionally, Kodak has agreed to produce a minimum of 15,000 kilograms of the product for the 1987-88 ski season, approximately $4 million in sales.

The Bio-Products Division of Kodak will use a scaled-up version of the fermentation process developed by AGS to produce the required amounts of "Snomax."

Kenneth C. Kennard, Kodak divisional vice-president and general manager of the Bio-Products Division, says Kodak's new advanced development and production center in Rochester, N.Y., provides "state-of-the-art" capabilities to support volume production of "Snomax."

"We're pleased to be playing a key role in making "Snomax" available in large quantities for the first time," says Dr. Kennard. "This product has tremendous sales potential and should be enthusiastically accepted by ski resort operators, given the high level of benefits it provides."

Joseph A. Bouckaert, AGS president and CEO, says the agreement with Eastman Kodak "will further enhance the development of AGS into a fully-integrated research, product development and marketing organization."

AGS is marketing "Snomax" in the US and says it has met over 50 percent of its projected sales figures for the 1986-87 season. To reach potential markets overseas, AGS has also established a marketing agreement with the Swedish company, Karlshamn Oljefabriker, to market the product in Sweden this year and to expand into continental Europe in the future.

Earlier this year, Environmental Protection Agency fined AGS for violating Federal regulations in carrying out safety tests of a genetically engineered microbe.

The company's tests of a genetically altered bacterial pesticide, "Frostban," were conducted on a rooftop, rather than in an enclosed facility, as required by EPA.

OILS, FATS & WAXES

Crude Tall Oil Price Falls; Weak TOFA Pricing Cited

Crude tall oil pricing going into the fourth quarter has fallen substantially from previous levels, according to industry sources. The drop comes in the wake of continued downward movement of prices on tall oil fatty acids (TOFA) and growing stocks of crude tall oil (CTO).

Buyers and sellers of CTO both are indicating prices in the range of \$90 to \$100. While the drop from the third quarter price range of \$135 to \$140 is a large one, it is not being greeted with very much surprise by the industry. The steady fall in TOFA prices led most of the industry to expect lower pricing on CTO.

Equally important in the price reduction is the plentiful supply situation of CTO, brought about by high running levels of paper mills. Paper production has increased 3.5 percent this year over last year, and paperboard production is up 7.1 percent, according to the American Paper Institute. These factors made the CTO decline fairly predictable, although not all producers expected the price to dip below \$100.

Producers of TOFA are hoping that this move will help their position in the fatty acids market. They have already been seeing their steady price reductions begin to pay off, as they are slowly winning back some of the market that they lost to soya fatty acids during the most recent periods of high CTO and TOFA pricing.

REGAINING MARKET

"We've already won back some of the market share from soya; we see this happening now," says one industry source. "TOFA is currently increasing its market share," agrees another, who likewise notes that he has seen some switching from soya fatty acids to TOFA, due to the increasingly attractive TOFA price.

At the same time, however, it is cautioned that a large segment of the market was lost earlier, and it has only begun to be won back. "The previous highs in pricing did a lot of damage to the TOFA market — it's really going to be difficult to get people back from soya," says a fractionater. "Once buyers change their formulations, they don't change back too readily," says another.

The fact of oversupply in the CTO and TOFA markets has led to downtime by fractionaters, with more expected before the end of the year. "Fractionaters have taken some maintenance downtime they wouldn't ordinarily take," says an industry source. CTO inventories at the beginning of September were 86,000 short tons, while the figure for one year previous was 69,000 short tons, according to Pulp Chemicals Association figures.

TOFA inventories at the beginning of September were 27,000 short tons of product containing 2 percent or more rosin, and 5,200 tons for TOFA containing less than 2 percent rosin. The figures for the beginning of September 1985 were 14,700 tons and 3,200 tons, respectively, according to PCA numbers.

This increase in stocks was not accompanied by a great rise in production. Consequently, TOFA producers have been more careful not to aggravate the oversupply situation, particularly because of the limited storage time of TOFA. As one buyer says, "Fractionaters must either move it or shut off distillation."

For the most part, fractionaters are cautiously optimistic that they will regain more of the fatty acids market, if not immediately, at least in the next several months. As long as soybean oil prices do not fall far from where they are now, say industry sources, TOFA should once again become competitive with soya.

PRICES TRENDLINES

WEEK ENDING OCT. 10, 1986

CHANGES/UP

Coconut oil, NY, ¼ per lb.
Corn oil, Midwest, ¾c. per lb.
Lard, loose, bulk tanks, Chicago divd., 1c. per lb.
Palm oil, NY, ½c. per lb.

CHANGES/DOWN

Cottonseed, 41% bulk, Memphis, \$5.00 per ton
Peanut oil, Southest (restricted), ½c. per lb.
Soybean, 44% bulk, Decatur, \$3.50 per ton
Soybean oil, Decatur, .43c. per lb.

OILS, FATS INDEX

The Oils, Fats & Waxes Index reflects the prices of 11 representative materials in this sector and the quantity of each produced in 1985.

Oct. 10, 1986	78.39
Oct. 3, 1986	79.85
Sept. 12, 1986	83.70
Oct. 11, 1985	86.19

Chemical Prices Start on Page 40

VEGETABLE OILS

OLIVE OIL — The price of Spanish olive oil is \$8.00 per gallon, in drums, and the price on Italian B-type is quoted at \$5.40 to \$5.50 per gallon. The market has been very quiet as most buyers, waiting for lower-priced new crop oil, are currently well covered, sources say.

The Spanish material being offered is seeing especially slow movement due to its high price, despite the fact that the Spanish government is said to be holding large carryover supplies, and a good crop is expected for this year. High export taxes being levied against Spain by the European Community are said to be making their olive oil price unattractively high, which has been allowing Italy to become a greater presence in the olive oil market, industry sources say.

PALM OIL — The price of this oil is continuing its climb, spurred by dealers covering short positions, and by sales last week to Pakistan and India. Another factor that has been boosting the palm oil price in recent weeks has been the strengthening of the soybean oil market.

The firmness in palm is not expected to last too much longer, though, industry sources say. There has been little domestic demand in the US, aside from nearby fill-in orders. Also expected to bring palm back down is the approach of traditionally high

FRIDAY SPOT PRICES

MARKET CLOSE OCT. 10, 1986

CRUDE VEGETABLE OILS		
Coconut oil, NY	lb.	.15½
Coconut oil, Pacific	lb.	.NA
Corn oil, Midwest	lb.	.19¾
Cottonseed oil, Valley	lb.	.14½
Linseed oil, Minneapolis	lb.	.26
Palm oil, NY	lb.	.13
Peanut oil, Southeast (restricted)	lb.	.25½
Soybean oil, Decatur	lb.	.1387
REFD. VEGETABLE OILS		
Coconut oil, t.w., NY	lb.	.20½
Corn, jumbo tanks	lb.	.27½
Cottonseed oil, jumbo tanks, NY	lb.	.24½
Peanut oil, jumbo tanks, NY	lb.	.33½
Soybean salad oil, NY	lb.	.1698
OILMEALS		
Cottonseed, 14% bulk, Memphis	ton	\$130
Linseed, extracted, 34% bulk, Fargo	ton	\$95
Peanut, 50% bulk, SE, Alabama	ton	\$165
Soybean, unrest., 44% bulk, Decatur	ton	\$151.80
FATS & GREASES		
Grease, white, choice, tanks, divd., NY	lb.	.10½
Grease, yellow maximum 10%, ffa tanks	lb.	.9
Lard, loose, bulk tanks, divd., Chicago	lb.	.17
Tallow, inedible, fancy, tanks, divd., NY	lb.	.12
Tallow, inedible, blch., tanks, divd., NY	lb.	.11¼

OILS, FATS & WAXES

production months in Malaysia, sources say.

SOYBEAN OIL — The price of soybean oil has started to come down from the high levels it was seeing over the last two weeks. The market is softening in response to some pick-up in harvest activity, as well as to a lack of consumer demand.

The previous rally, spurred by weather concerns and short covering in the face of low supplies, is dissipating along with the rainy weather in many of the soybean growing areas. The increase in harvesting has been small, sources say, but enough to help alleviate weather-related fears over the condition of the crop.

The lower buying demand which is helping to bring the market down is largely the result of consumer confidence that new crop oil will be flowing in the pipelines soon, at reduced prices. Actual price movements will depend on the progress of the harvest, but some continued softening is likely, sources say.

FATS & GREASES

TALLOW — Tallow pricing is firm, as offers continue to be scarce in the market, sources say. Production of tallow has been slow, stifled in part by consumers trying to avoid cholesterol, says an industry source.

FISH OIL

MENHADEN OIL — The menhaden oil market in the US has been enjoying a pick-up in demand from European buyers. Export prices have moved up about $50 per ton, according to an industry source, who notes that the price rise in palm oil helped push menhaden oil up as well.

Domestically, prices have not changed in recent weeks, nor has the slow demand situation improved. Producers are optimistic, however, that the price here will firm up in the fourth quarter, as fishing in the US and Japan slows to a halt, and stocks begin to dwindle.

MISCELLANEOUS

COCOA BUTTER — The price of cocoa butter has come down to $2.20 per pound. The lower price has come as a result of lower demand, as well as a fall in the price of cocoa beans. "Cocoa bean crops in the Ivory Coast were not as badly damaged from earlier dry weather conditions as we had previously thought," says an industry source. The cocoa butter price is expected to fall further, and an increase in demand is expected to come soon.

PERFUMES & FLAVORS

Continued from Page 38

situation to recent Chinese success: "The Chinese have sold large quantities over the last 7 or 8 months, so offers from them are very limited; for the most part they're only offering 1987 lots." The Chinese are the only suppliers of litsea cubeba oil, gathered from the wild-grown May Chang tree.

Sources emphasize that pricing for litsea cubeba oil has an automatic ceiling because of citral prices. "Though some buyers must have the natural oil," observes an importer, "the majority of the market would move into synthetics if the litsea cubeba prices increased too much." Now, however, buyers are seeking the natural oil.

SEEDS AND SPICES

BLACK PEPPER — Spot prices jumped another 11c. to 13c. to $2.28 to $2.30 per pound last week, due to increasingly short supplies. The longshoremen's strike up and down the East Coast temporarily interrupted the influx of new supplies, increasing demand for available warehouse inventories. Strong demand is continuing and has pushed pepper futures prices up from 10c. to 13c. per pound. This, along with a backdrop of expected shortages from points of origin (CMR, 10/3/86, p. 31), leads industry sources to anticipate even higher prices in the near future.

AROMATIC ORGANICS

Paraxylene Pricing Is Cut; New Capacity Looms in Japan

Paraxylene producers have reduced contract pricing by ½ cent per pound this quarter, citing the imminent arrival of a substantial amount of capacity in Japan and domestic competition from low US cotton prices in the fiber end use market.

The new contract price is 19 cents per pound, down from the 19½ cents per pound of the previous two quarters. Lyondell Petrochemical Company is said to have been the first producer to make the change. Spot pricing is quoted between 17¼ and 17¾ cents per pound.

In addition to competitive pressure among producers, the price reduction is attributed in part to end-market considerations. Congressional legislation this year has brought cotton pricing down substantially in order to better enable US growers to compete on the world market.

Paraxylene producers say that this action has had an impact on their dimethyl terephthalate market, a majority of which goes into polyester fiber production. With cotton pricing reduced, polyester makers have been seeking relief from feedstock pricing in order to better compete.

Polyester demand has remained fairly steady, paraxylene producers say, although it is observed that there has been some downtime in the DMT industry that has cut into paraxylene consumption. Of note, it is reported that E.I. du Pont de Nemours & Company, Inc.'s 600-million-pound-per-year plant at Old Hickory, Tenn., needed to be shut down for about a week recently.

Also contributing to slightly looser paraxylene market conditions this quarter, according to one producer, has been "a lot of excess availability of European material." A downturn in European demand is seen as resulting in a pickup in the flow of product from Europe to the US and an increase in competition with US producers for the Far Eastern market.

Producers acknowledge that the startup of two Japanese paraxylene plants in the next few months is in the process of altering the Far Eastern picture. The Far East "is getting a little pricey," says one producer, and another observes that "people (there) are letting their inventories come down" in anticipation of lower prices from the increased availability of nearby material.

DECEMBER START-UP

It is expected that one of the plants will commence production in December, and that the other will start up around April. Sources say each plant will be capable of producing approximately 220 million pounds of paraxylene per year.

Although it is assumed that the new capacity will substantially cut into US exports to the Far East, one producer says that, with demand from the region growing "almost by leaps and bounds," the market should continue to be a good one for US exporters. "We are seeing a little bit of jockeying for position, but it should be temporary," he asserts.

One producer says that, in addition to the anticipated new Japanese capacity, the shutdown for nearly a month of an Indonesian fiber plant has had a curtailing effect on demand for US exports. Also, it is reported that Mexico, even though its plant is still hardly producing any material, has not been buying quite as heavily as expected.

Domestically, although DMT demand for polyester use has not been strong, PET resin use continues to grow dramatically from a smaller base. "PET is getting to be a bigger factor," says one producer, and it is noted that a substantial amount of capacity has been added to the PET industry this year.

Paraxylene producers, while expressing disappointment with this quarter's price decline, agree that margins this year have been satisfactory. It is noted that prices held fairly steady for much of the year while crude oil values fell.

Though estimations of the industry's operating rate vary, production is said to be up from last year. However, looking ahead, producers express concern over the new foreign capacity and feedstock xylene tightness related to strong octane demand. "We finally got some decent margins ... but I don't think next year will be nearly as good," concedes one producer.

However, it is pointed out that the implementation next year of higher purity specifications in some European countries could partially offset the new capacity on the world market. It has been estimated that US paraxylene capacity was effectively reduced by 5 to 10 percent this year by more stringent requirements here.

PRICES TRENDLINES

WEEK ENDING OCT. 10, 1986

CHANGES/UP
None

CHANGES/DOWN
None

AROMATICS INDEX

The Aromatic Organics index reflects the prices of 14 representative materials in this sector and the quantity of each produced in 1985.

Oct. 10, 1986	167.84
Oct. 3, 1986	167.84
Sept. 12, 1986	167.84
Oct. 11, 1985	167.84

Chemical Prices Start on Page 40

ANILINE — USS Chemicals says that its 200-million-pound-per-year Haverhill, Ohio unit, which went down following the September 20 production outage at the company's phenol unit at the same location, resumed production October 9.

First Chemical Corporation, which experienced a production outage in June, says that it is "running close to normal now." Production has been increasing in stages, says a spokesman, and the facility was shut for a couple days at the end of September to make some minor adjustments. One more small adjustment is forthcoming, he says, before full production is reached.

Producers say that, with these outages, the market has been on the tight side. First Chemical and E.I. du Pont de Nemours & Co., both of which increased list pricing to 35½c. per pound during the Summer, say the list change has held.

Strong demand from the diphenylmethane di-isocyanate (MDI) sector, which accounts for about 60 percent of aniline usage, is said to be a driving factor in the market. "The MDI guys are running great guns, and discounts from list are shrinking," comments one aniline producer.

Another producer says that low inventory levels and tight supply conditions will likely prevail until the end of the year. Barring another production disruption, he says, the market should then return to a normal, less tight condition.

Aniline producers are hopeful that MDI will continue to grow strongly in 1987, and this will depend heavily on the construction and automotive end markets, the major outlets for the product. One new application, in RIM products, is said not to have panned out in 1986 to the anticipated extent.

BTX — Spot benzene was quoted at 81c. per gallon last week, a level that has been fairly constant since late September. Industry sources say that, if anything, there is some slight upward pressure on pricing.

"The market is relatively bullish," says a

AROMATICS

buyer, but "there is not a whole lot of activity." A supplier adds that "there is not a lot of spot benzene around."

Sources say that, though major derivative styrene is firm, much of this is related to downtime in that industry. The downtime is seen as curtailing demand for benzene, and thus keeping benzene prices from getting particularly strong.

The benzene contract price level has been holding steady at 85c. per gallon since mid-September. Industry sources say that the outcome of Organization of Petroleum Exporting Countries' meeting could give the market some direction.

Spot toluene pricing is quoted between 65c. and 67c. per gallon, relatively unchanged from the previous week. Toluene pricing had been slipping for a couple of weeks, a trend attributed to weak gasoline pricing.

It is said that toluene could slip further, and one source says that octane demand has tailed off a bit recently due to considerations of economics.

The spot xylene market is quoted at 75c. per gallon. This price has been holding steady, and is expected to continue to do so or firm slightly.

PHENOL — Producers say the 2c. per pound industrywide price increase, implemented October 1, has failed to hold.

Dow Chemical USA instituted a 2c. per pound temporary competitive allowance (TCA) retroactive to October 1. At the same time, Dow stated its intention to withdraw the TCA on November 1. Other producers said they would meet competitive pricing.

"The industry would like to see an increase," says one producer who points out weak margins in the business, "but it appears strongly that the entire market will be rolled back."

Psoriasis Treatment

Continued from Page 7

in which the lesions are red and widespread, and pustular psoriasis, in which the lesions contain pus.

Discontinuation of treatment with etretinate often met with some degree of relapse at the end of two months, but subsequent treatment usually resulted in a clinical response similar to that obtained with the initial treatment.

The birth defects caused by the drug include gross abnormalities of the head and brain as well as malformed limbs and joints. Often, several defects may occur.

A boxed warning in the labeling accompanying the drug states that the drug must not be used by females who are pregnant, who intend to become pregnant or who may not use reliable contraception. Researchers have not yet determined when pregnancy could be safely planned after treatment. Detectable blood levels of the drug have been reported in some patients up to nearly three years after the drug was stopped.

Serious side effects also have been seen in patients themselves. These include liver damage and corneal and skeletal changes. Signs and symptoms of vitamin A toxicity often occur, including bone and joint pain, skin rash and hair loss.

Roche will provide patient pamphlets, leaflets and red warning stickers for distribution by physicians and pharmacists relating to the side effects, the probability of major fetal abnormalities and the need for effective contraception before, during and after treatment with etretinate.

Approximately 80,000 people in the United States may be candidates for the drug because of severe psoriasis which is unresponsive to other therapies. The other currently available treatments include tar baths, steroids, a combination of drug therapy and light called PUVA (for oral psoralen and high-intensity ultraviolet-A light) and methotrexate.

Since significant adverse effects are associated with its use, etretinate should be reserved for patients with severe recalcitrant psoriasis. It shoud be prescribed only by physicians knowledgeable of the effects of this class of drugs, known as retinoids.

Etretinate is the second in a class of drugs called oral retinoids to be approved in the US. The first was isotretinoin ("Accutane"), approved in 1982 for severe and recalcitrant acne.

ALIPHATIC ORGANICS

Caprolactam Sparked

Continued from Page 3

percent to 571 million pounds. (The reported figures represent all nylon fiber shipments, including nylon 6, nylon 6/6, the largest form of nylon, and other nylons).

While residential carpeting for new homes is pacing the upturn in nylon fiber demand, sources say replacement carpeting, commercial carpeting, and automotive carpeting have all registered demand gains as well in 1986. In addition, other caprolactam-based fiber markets are growing this year. Tire cord, made for off-road vehicles such as construction equipment, has enjoyed higher demand this year. Also, the beleaguered textile industry, smothered by imports for the past several years, has received some relief from the softening dollar. "With the value of the dollar down, we're beginning to see a slow shift toward home grown nylon textiles," says one caprolactam producer.

AUTO APPLICATIONS

While nylon fibers dominate caprolactam tonnage, the resin business, particularly in automotive applications, is registering the highest growth rates. An Allied-Signal official says consumption of nylon in plastics applications (including nylon 6/6, 6, and others) will reach 435 million pounds this year, an 8 percent increase from 1985. The Allied official says nylon 6 accounts for 30 percent of this total.

Looking ahead, the Allied official says the nylon resins business will grow 7 percent annually for the next five years. The major consumer of nylon resins is the automotive industry, accounting for 45 percent of demand. Detroit is rapidly adopting plastic body panels, and nylon resins are in the forefront of thermoplastics consumed in this area.

At present, Du Pont and General Electric dominate this market, forming composite blends of nylon 6/6 with other plastics. However, Allied and BASF are both making strong pushes into the auto industry with nylon 6-based products. Allied currently has 100-million pounds of nylon-6 resin capacity and is planning further expansions.

BASF is a relative newcomer to engineering thermoplastics. The company formed an Engineering Plastics division in 1984 and is developing products based on nylon 6, acetal, and polybutylene terephthalate polymer technology.

The company is still mustering its resources to compete directly in the auto market. At present, BASF is supplying nylon resins to compounders, packagers, electrical consumers and other auto related customers.

A BASF spokesman says that as its resin business grows, it will divert capacity from its fiber operations and convert them into resin lines. The BASF spokesman says the purchase of American Enka provides enough nylon fiber capacity to allow BASF to make these conversions.

The bulk of Nipro's merchant caprolactam sales is directed toward the resins business, a company official says. As the market grows, Nipro expects to bring on its idle capacity to help supply the market. A Nipro official also sees two other avenues for the added merchant capacity. The official speculates that Allied and BASF might move away from some of their fiber accounts as their needs to increase resin production grow. Also, the official foreesees a need to supply caprolactam to Allied and BASF as their requirements exceed supply.

Nipro already is under contract to supply caprolactam to BASF, following the American Enka purchase last December. However, a BASF official stresses that his company contracted Nipro in order for BASF to maintain its own merchant accounts.

Strong domestic demand has forced a cutback in exports this year, producers say. An Allied official says his company has had no excess production to export this year, and a Nipro official says his company has curtailed exports. All totalled, caprolactam exports will only reach 30 million pounds this year, down from over 60 million pounds in 1985.

Caprolactam raw material prices have been on a rollercoaster this year, first pushed way down by declining oil prices, and now under upward pressure as benzene prices have rallied in the second half. Allied makes

PRICES TRENDLINES

WEEK ENDING OCT. 10, 1986

CHANGES/UP
None

CHANGES/DOWN
None

ALIPHATICS INDEX

The Aliphatic Organics index reflects the prices of 20 representative materials in this sector and the quantity of each produced in 1985.

Oct. 10, 1986	222.80
Oct. 3, 1986	222.80
Sept. 12, 1986	222.80
Oct. 11, 1985	222.80

Chemical Prices Start on Page 40

ALIPHATIC ORGANIC EXPORTS: AUGUST

BUREAU OF CENSUS FIGURES IN POUNDS ON THE KEY ALIPHATICS

		AUGUST		JULY	
		QUANTITY	$ VALUE	QUANTITY	$ VALUE
Acetic Acid	lbs.	27,501,630	2,844,858	24,099,104	2,758,566
Acetone	lbs.	4,062,734	1,008,825	10,597,929	2,335,949
Acrylonitrile	lbs.	72,863,326	17,155,645	62,156,004	1,408,183
Adipic Acid	lbs.	4,797,510	2,282,302	5,492,197	2,539,524
Butadiene	lbs.	7,328,167	1,090,914	15,067,519	2,291,332
Butanol	lbs.	12,752,313	2,681,302	17,730,381	3,796,907
Butyl Acetate	lbs.	6,073,315	1,626,853	7,596,328	1,944,307
Caprolactam	lbs.	3,510,611	1,952,090	1,524,961	764,481
Chlorinated Hydrocarbons	lbs.	5,659,243	1,280,197	5,032,699	1,651,105
Ethanolamines	lbs.	19,491,642	5,773,419	10,191,032	2,740,344
Ethyl Acrylate	lbs.	6,521,722	2,365,115	7,208,974	2,706,389
Ethyl Alcohol	lbs.	53,001	139,246	441,325	854,600
Ethylene Dichloride	gals.	24,350,152	2,129,094	55,676,764	5,334,266
Ethylene Glycol	lbs.	31,295,146	5,100,114	38,016,601	6,149,931
Formaldehyde	lbs.	1,017,235	168,834	1,026,460	133,748
Glycerine (Crude)	lbs.	151,871	78,674	135,946	78,023
Glycerine (Refined)	lbs.	1,266,313	1,007,936	1,034,602	669,524
Glycols	lbs.	4,631,901	3,076,417	8,072,695	5,294,472
Methanol	lbs.	1,609,043	562,959	4,924,196	1,545,018
Methyl Ethyl Ketone	gals.	9,292,428	1,970,850	6,336,410	1,679,443
Methyl Methacrylate	lbs.	9,697,716	3,800,521	8,865,402	3,299,358
Methylene Chloride	lbs.	5,046,420	685,357	12,557,463	2,162,017
Perchloroethylene	lbs.	9,726,000	1,247,405	2,084,052	235,921
Polyethylene Glycol	lbs.	1,368,162	922,693	896,254	686,751
Polypropylene Glycol	lbs.	15,379,597	6,955,248	14,343,093	6,807,087
Propyl Alcohol	lbs.	21,858,606	3,697,120	16,406,602	2,638,284
Propylene Glycol	lbs.	7,092,668	2,029,652	11,152,553	3,532,001
Propylene Oxide	lbs.	26,196,312	9,868,216	6,702,372	2,794,037
Trichloroethylene	lbs.	2,738,111	630,360	7,879,764	2,002,336
Vinyl Acetate	lbs.	52,690,949	9,455,964	65,147,856	12,491,257
Vinyl Chloride	lbs.	137,001,713	21,704,044	180,866,344	26,323,605

ALIPHATICS

caprolactam from phenol, which is made from purchased cumene. Cumene prices dropped from over 19 cents per pound in January to 13 ¼ cents in July before firming to 15 cents at present. An Allied official says costs savings from falling raw material prices have been offset by lower prices on phenol byproduct, acetone, and caprolactam byproduct, ammonium sulfate, both of which Allied sells on the open market.

BASF and Nipro both use purchased cyclohexane as their principal raw material, and it, too, followed the steep decline in benzene prices suffered earlier this year. Cyclo pricing plunged from about $1.30 per gallon in January to a low of 85 cents per gallon in April. Since then, prices have climbed back to just under $1.00 per gallon. Through this, caprolactam prices dipped from 70 cents per pounds to a current 62 cents-to-65 cents-per-pound range, delivered.

ALPHA OLEFINS — Production capacities for Japanese alpha olephins facilities were incorrectly reported in this space (CMR, 9/22/86, pg. 3). US marketers say that Idemitsu Petrochemical Company has announced construction of a 110-million-pound-per-year unit by the end of 1987. Mitsubishi already has 66 million pounds per year of capacity in place in Mizushima, Japan.

GLYCERINE — Production of crude glycerine, including synthetic, totaled 25.2 million pounds in August, according to Commerce Department. That represents a slight increase over the July figure, but a jump of 3.3 million pounds over the August 1985 number.

Producer stocks of crude and refined glycerine stood at 33.8 million pounds at the end of August, Commerce says. This figure is down 2.9 million pounds from the end-of-July level, but up 7.5 million pounds from levels seen in August 1985.

Glycerine imports amounted to 6.1 million pounds in August, compared to 3.9 million pounds during the previous month and 21 million pounds during August 1985.

At the end of August, cumulative imports were 38.9 million pounds, compared to 24.5 million pounds for the same period.

At 1.3 million pounds, exports in August were up slightly from the July level of 11 million pounds and unchanged from the August 1985 level. Cumulative exports through August stand at 11.1 million pounds, just over half of the total for the same period last year.

Total domestic disappearance of glycerine was 32.9 million pounds in August, up from the revised July total of 31.2 million pounds and up from the August 1985 total of 28 million pounds. Year-to-date domestic disappearance amounts to 239.5 million pounds through August, an increase over the 203.4 million-pound level through August of last year.

Dinoseb Halted

Continued from Page 3

halt the use of dioxin-contaminated 2,4,5-T, the herbicide used in Agent Orange, and ethylene dibromide, a fumigant that had entered into much of the nation's grain supply.

The immediate ban of dinoseb is a follow-up to an August 28 EPA announcement warning the agricultural community about the possible adverse effects of exposure to the chemical.

Mr. Thomas said the emergency action was based on studies recently received by the agency indicating that dinoseb caused birth defects in laboratory animals. Defects included irreversible neurological and skeletal malformations in the offspring of animals exposed to the chemical, he said.

Mr. Thomas also said the agency has received other studies showing that dinoseb causes fertility effects in male rats and mice, indicating a significant risk for males who apply the chemical to fields.

A spokesman for Uniroyal said the company has considered dinoseb a safe product when used in accordance with label instructions. But he noted that the company has not seen the new health effects data cited by EPA.

The spokesman said the company intends to request a hearing by an administrative law judge and hopes to keep the product on the market after modifying the hazard warning information on the label.

EPA estimated that the ban will cost American farmers as much as $90 million per year. Between 7 million and 11 million pounds of dinoseb active ingredients are annually sprayed as a liquid from airplanes, tractor-drawn equipment and hand-held equipment. The herbicide registered since 1948 is used to kill broadleaf weeds. It is not registered for homeowner use.

The major use sites (by volume) include soybeans (40 percent), cotton (15 percent), potatoes (16 percent), peanuts (9 percent), alfalfa (4 percent) snap beans (2 percent), peas (2 percent), grapes (2 percent) and almonds (1 percent).

Other use sites include clovers, flax, barley, oats, rye, wheat, apples, apricots, cherries, citrus, dates, figs, nectarines, olives, peaches, plums, filberts, pecans, walnuts, blackberries, blueberries, boysenberries, gooseberries, loganberries, raspberries, strawberries, cucumbers, pumpkins, squash, currants, lima and kidney beans, onions, garlic, hops, ornamentals, cone bearing trees, right-of-ways and aquatic drainage ditches.

In addition to the birth defect and adverse reproductive effects studies, the agency has evidence that dinoseb is oncogenic (tumor causing) in mice. Limited studies suggest that dinoseb has the potential to affect the immune system. This product also has the potential to damage human eyes. It is well established that humans exposed to dinitrophenols (a chemical class of which dinoseb is a member) have developed cataracts.

The common trade names for dinoseb are: DNBP, DNOSBP, "Dinitro," Dinoseb (F-ISO), Caldon, Sinox, Vertac General and Selective Weed Killer, Rasanite, Chemox General and PE, Chemsect, Dinitrix, Dinitro-3, Dinitro General, Drexel Dynamite 3, Dynamite, Elgetol 318, Gebutox, Hel-Fire, Kiloseb, Netrophone C, Subitex, Unicrop DNBP, Vertac Dinitro Weed Killer 5, Dynanap, Premerge Plus with Dinitro, and Klean Krop.

Approximately 45,000 workers are exposed to dinoseb annually, according to EPA. The emergency ban is expected to prevent more than 25,000 workers from being exposed to the chemical while the agency pursues a permanent ban.

ALIPHATICS

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Mining Wastes Are Under Study

Environmental Protection Agency says it will study mining waste streams from the processing of ores and minerals to determine whether or not they should be regulated under the Resource Conservation & Recovery Act (RCRA).

Such waste streams were exempted from RCRA regulations in 1980 by Congress until these studies were completed.

But a Federal court last year imposed a September 30, 1986 deadline on the agency to complete its determination of which specific processing waste streams were encompassed by the mining waste exemption and should be studied.

Based on various comments received on an October 1985 proposal to determine the scope of the exemption, EPA was unable to issue a final regulation in time to meet the court-imposed deadline. Consequently, the current mining waste exemption remains in place.

The agency says it will expedite and complete its first studies within a few months on the six wastes it proposed to list as hazardous in the October 1985 proposal.

Those wastes are spent aluminum potliners, copper acid plant blowdown, lead surface impoundment solids, ferro-chromium-silicon emission control dust/sludge, ferro-chromium emission control dust sludge, and zinc wastewater sludge.

EPA says it will study the remaining processing wastes sequentially based on the level of health and environmental concern.

Waste Tanks Get Restriction

Tanks used by small quantity generators to accumulate hazardous wastes before the wastes are shipped off-site would be subject to the same dual containment requirements now in effect for tanks maintained by larger generators, according to a proposal by Environmental Protection Agency.

Small generators who produce between 220 and 2,200 pounds of hazardous waste a month would be required to perform periodic leak assessments of all existing hazardous waste tank systems, and provide leak detection capabilities with the installation of secondary containment.

Under the proposal, secondary containment would be required for new tank systems, but would be phased-in for existing tank systems.

Lonza Initiates Price Increases For USP Niacin, Niacinamide

Lonza, Inc. has initiated the first USP niacin and niacinamide price increases in more than two years.

Effective November 1, all grades of USP niacin and niacinamide will cost $6.50 per kilogram, an increase of 50 cents per kilogram. Furthermore, quantities of 1,000 to 4,999 kilograms of each product will move up to $6.75 per kilogram, and quantities of less than 1,000 kilograms will rise to $7 per kilogram. These increases also amount to 50 cents per kilogram.

The increases, if they hold, could indicate a turnaround for the lackluster USP side of niacin and niacinamide. As recently as July 1, when the prices for feed grades of niacin and niacinamide rose, the USP side was called depressed. A decrease in vitamin consumption led to oversupply and slackened demand, and pricing fell from between $7.50 and $8 per kilogram down to the recent level of $6 per kilogram.

But now, says a Lonza spokesman, vitamin consumption is on the upswing. The spokesman believes there is a "trendiness" associated with taking vitamins now, as well as a trendiness in overall health consciousness. To further illustrate his point, he notes that manufacturers of foods such as soft drinks and cookies are promoting the products' vitamin fortification, even though they are not thought of as "health" foods.

Even though a price increase has finally occurred for the USP products, the Lonza spokesman is not convinced this is the beginning of a firming trend. He says that it is premature to speculate on future pricing, especially on the heels of a long depression.

Other USP suppliers of niacin and niacinamide are examining the increases, but have not yet announced whether they will follow Lonza's lead. One supplier says his company has not raised its prices for almost three years, and therefore will study the Lonza increase carefully.

JULY INCREASES HOLDING

Meanwhile, the feed side's July price increases are holding, according to sources. As was the case for USP, the feed side saw depression for about two years before 1986 price hikes. With increased interest in how much feed grade niacinamide should be used in animal feeds, coupled with decreased broker activity because of the falling dollar, pricing is not expected to regress.

Current feed-grade pricing is as follows: for niacin, $5.50 per kilogram for 200 bags and more; $5.75 per kilogram for 40 to 199 bags; $6 per kilogram for 10 to 39 bags; and $6.25 per kilogram for one to nine bags. A bag is 25 kilograms.

For niacinamide, the prices are $5.85 per kilogram for 5,000 kilograms and more; $6 per kilogram for 1,000 to 4,975 kilograms; $6.40 per kilogram for 250 to 975 kilograms, and $6.75 per kilogram for less than 250 kilograms.

Overall, imports of niacin and niacinamide are substantially larger than last year's, while exports are substantially down. Through July, USP niacin imports are up threefold, to about 1.7 million pounds, up from about 554,000 pounds in 1985. Likewise, niacinamide imports rose to 2.1 million pounds, an increase of about 60 percent over 1985's 1.3 million pounds through July. The Bureau of Census doesn't differentiate between USP and feed grade niacinamide.

Exports have declined by about 30 percent, to 326,000 pounds, down from 469,000 pounds. Import statistics don't distinguish between USP and feed grades.

Observers do not expect the recent acquisition of Nepera, Inc. by CasaChem Group to have any effect on the marketplace, but they also note that it is too early to be certain.

BACITRACIN — This product's price has been stable since the beginning of 1986, reports a trade source. Demand is steady and strong.

Microfine nonsterile USP bacitracin is listed at $7.90 per million units, for orders of one billion units. For between one and five billion units, the price falls to $7.70 per million units, and for more than five billion units, bacitracin costs $7.50 per million units.

Bacitracin zinc micronized nonsterile USP costs $9 per million units, for an order of one billion units. The price is $8.40 per million units for orders of one to five billion units, and $7.70 per million units for more than five billion units.

PRICES TRENDLINES

WEEK ENDING OCT. 10, 1986

CHANGES/UP
None

CHANGES/DOWN
None

DRUGS INDEX

The Drugs & Fine Chemicals index reflects the prices of 10 representative materials in this sector and the quantity of each produced in 1985.

Oct. 10, 1986	211.16
Oct. 3, 1986	211.16
Sept. 12, 1986	211.16
Oct. 11, 1985	211.16

Chemical Prices Start on Page 40

IMMUNOPURIFICATION REAGENTS

Celltech Limited of England introduced a new entry in its line of immunopurification products recently, at "Biotechnica '86" in Hanover, West Germany.

The product, "Reselute-BSA," will be used to remove bovine serum albumin, a contaminant of pharmaceutical compounds produced by mammalian cell cultures such as therapeutic anti-cancer monoclonal antibodies, lymphokines and interferons. Celltech claims that its product will be the only one of its kind available worldwide.

"Laboratory trials have proven 'Reselute-BSA' to be highly effective in removing the bovine serum albumin...without significantly affecting the yield of the desired product," notes a Celltech spokesman. Another spokesman explains that after using bovine serum albumin, it may subsequently prove difficult to remove, because it behaves like the product it is being used in during separation.

Celltech also sells "Reselute IL-2" and "Reselute IL-2 IRMA" for the purification and assay, respectively, of interleukin-2.

NITROGLYCERIN — Parke Davis, a division of Warner-Lambert, has released a prescription nitroglycerin delivery system which allegedly treats and prevents angina pectoris, associated with coronary heart disease.

The product, "Nitrogard," contains nitroglycerin and is orally taken in a controlled release tablet form. According to Parke Davis,, the nitroglycerin is impregnated into a matrix of fibers similar to cellulose. The product can be placed between one's upper lip and gum on either side of the front teeth or between one's cheek and gum. The tablet stays in place because once it's in contact with saliva, it becomes sticky.

"Nitrogard" is available in one-, two-, and three-milligram tablets. Recommended starting dosage is one milligram, three times daily, preferably with meals. Usual maintenance therapy is two milligrams, three times daily. A spokesman notes, however, that this may vary, depending on a physician's recommendation.

VITAMINS — EM Industries is raising its prices for various vitamins, effective November 1.

Ascorbic acid is being increased by $1 per

kilogram, to $11. Also increasing, by $3 per kilogram, is pyridoxine hydrochloride, which will cost $36.

An EM spokesman notes that direct compression grade ascorbic acid, as well as other specialty grades, will rise proportionally. Lastly, EM is establishing a list price of $14.50 per kilogram for calcium ascorbate. Previously, there was no published list price.

The spokesman attributes the price increase to US currency devaluation in relation to the deutsche mark. EM imports its vitamins from West Germany and claims that, because of the devaluation, "return on investment is poor."

These increases for vitamins are the first announced by a major player since Summer. EM, as well as other players, comments that prices for these vitamins are below the levels of the early 1980's.

Meanwhile, other vitamin sources are evaluating the EM increases. One spokesman claims that although the US dollar has been relatively stable recently, sellers anticipate a further softening and want to be prepared.

Waste Study Funded by EPA

Tufts University Center for Environmental Management has received $24 million from Congress to study the effects of hazardous waste on health and the environment.

The grant will be administered by US Environmental Protection Agency.

The center, which had previously received more than $3 million in federal aid since it opened in 1984, sponsors research and organizes conferences on waste treatment policy and technology, groundwater contamination and health effects of chemical exposure, among other things.

The new grant will support research by center staff members and Tufts faculty members on the university's Medford, Boston and Grafton campuses. "Interdisciplinary research is being stressed," a spokesman said. "Research projects will bring together medical specialists, engineers, scientists and policy analysts to address complex environmental problems."

"Of particular interest is the center's work on health issues, where it is assessing the effectiveness of several new quick, inexpensive tests of chemical toxicity in humans," he said.

This fall, the center will conduct the country's first national conference on household hazardous waste. It will be held in Washington, D.C., in cooperation with the EPA. The center also will co-sponsor an international environmental conference with the Sierra Club in 1987.

The center is supported by industry as well as the federal government. Stone & Webster Engineering Corp. in Boston, Monsanto, General Electric and AT&T are some of the early contributors to the center's Corporate Affiliates Program. Company representatives will help the center set a research agenda to address problems posed by industrial waste.

Cd Pesticide Could Be Nixed

Environmental Protection Agency is proposing to cancel the pesticidal uses of cadmium after determining that the risks of continued use outweigh the benefits.

The agency says it based its decision on data which show that exposure to cadmium results in carcinogenic and adverse kidney effects in test animals and humans. It says it is primarily concerned about the hazard cadmium may pose to applicators.

Produced primarily by Mallinckrodt, Inc. and C.A. Cleary, Inc., cadmium compounds have been registered since the late 1940s as fungicides for control of certain diseases in ornamental turf. Cadmium fungicides are used almost exclusively by turf-maintenance personnel on golf courses.

Approximately 30 pounds of cadmium are used annually for pesticidal purposes, less than 0.1 percent of the total cadmium usage in the United States. The majority of pesticidal use of cadmium is in midwestern states, where about eight percent of the golf course acreage is treated versus two percent nationwide.

Two application methods are used to treat golf course turf: hand held sprayers for greens and tees, and ground boom sprayers for fairways. Homeowners apply the pesticide by garden sprayers or hose-end applicators. Applicators are exposed to cadmium (via dermal and inhalation routes) during the mixing, loading and application.

EPA's estimates indicate that the dermal and inhalation exposure levels from use on golf courses are close to those which cause kidney effects. Estimates of exposure from application to home lawns are less but are of concern. The agency has also determined that the oncogenic risk to persons applying cadmium fungicides to golf courses, based on estimates of inhalation exposure, is unacceptable.

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CMR-10

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FIFRA Reform

Continued from Page 7

baum amendment "a major threat to the bill," and says the industry would probably withdraw its support if the measure is retained.

Another potential roadblock is the question of liability. The House exempts farmers from liability for damages caused by pesticides provided they do not act negligently, but it shifts responsibility for cleanup to the pesticide manufacturer.

NACA favors the language adopted by the Senate Agriculture Committee which exempts farmers from liability for damages if they followed label directions, but does not shift the liability from the pesticide user to the manufacturer.

However, the committee's provision was deleted from the bill by Sen. Dave Durenberger (R-Minn.), so the matter will have to be resolved in conference.

The NACA spokesman says the industry is also somewhat concerned about a groundwater protection amendment added to the bill by Sen. Durenberger that focuses on the prevention of contamination, rather than on detection or cleanup.

The industry's concern stems from the fact that EPA would be required to issue regulations under the Safe Drinking Water Act which is within the jurisdiction of the congressional environmental committees.

NACA believes the industry's interests would be better served by placing the groundwater protection program under the jurisdiction of the agriculture committees.

Another area of major controversy is the issue of data compensation — how much money a generic pesticide manufacturer should have to pay to make use of a pioneering company's health and safety data on as pesticide, and how that amount should be determined.

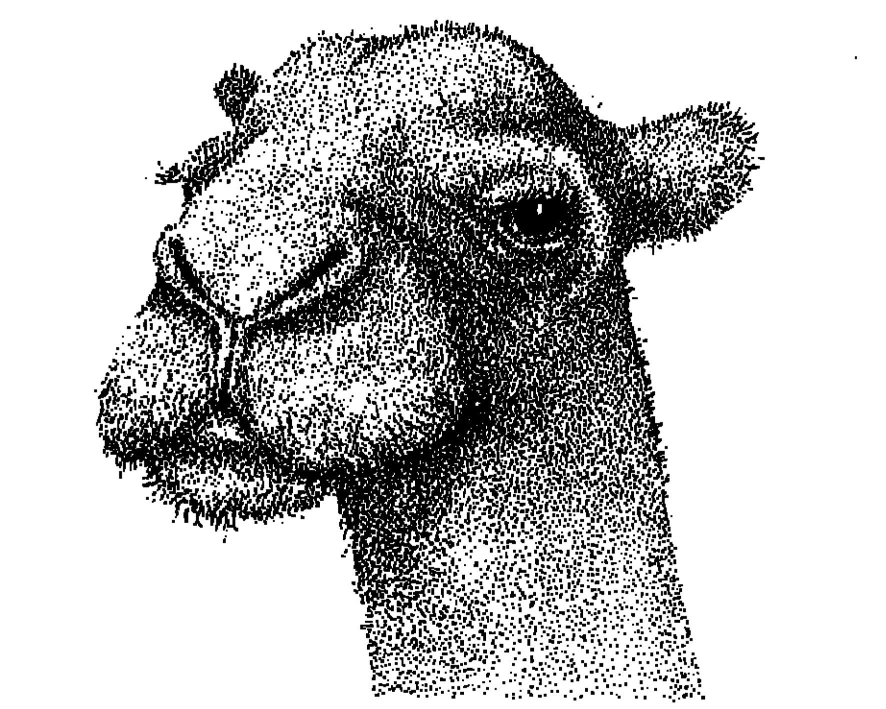
Rather than generating the expensive data required for registration by EPA themselves, generic companies would prefer to buy the data from the companies that developed the pesticides and conducted the original research.

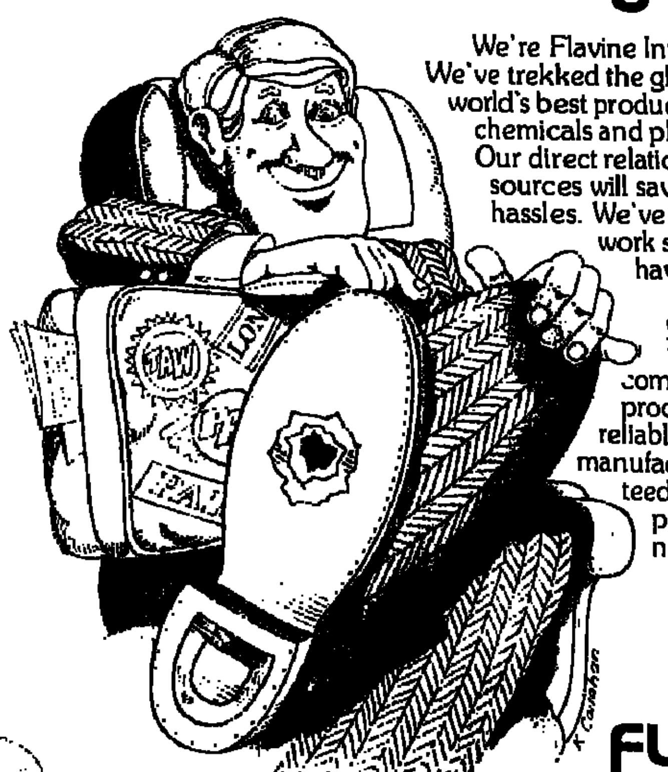
Current law allows this practice and provides for an independent arbitration board to determine the price to be paid to an R&D company for use of its data.

But the law does not specify whether the price should be based on the amount it cost the innovator company to perform the health and safety tests — usually a few million dollars — or on the market value of the pesticide — which can be worth tens or even hundreds of millions of dollars.

In the only case to go to arbitration so far, the award amounted to 60 percent of the cost of the data plus a ten-year royalty. In all, the value of the award is estimated to exceed $15 million — an amount five times the cost of producing the data. Fearing similar arbitration decisions, generic manufacturers have been reluctant to enter the market.

The House bill slightly alters current law by limiting data compensation awards to twice the amount it cost to develop the data only in cases where the R&D companies have obtained patent term extensions.





Fertilizer Group Sees Challenges

International trade barriers, mounting debt in Third World nations and modest demand projections are the major challenges facing the fertilizer industry, according to speakers at a recent international fertilizer conference.

US producers oppose American Export-Import bank loans to national industries competing directly with domestic manufacturers, said Gary D. Myers president of the Fertilizer Institute and host of the Institute's World Fertilizer Conference recently held in San Francisco. He says the Institute is lobbying Congress to take trade retaliation measures against countries imposing tariff and nontariff barriers against US exports. "We only seek trade reciprocity," he says, noting that all fertilizer imports enter the US duty-free.

The current weak fertilizer economy is largely due to decisions made thirty years ago based on predictions of world food shortages, according to Emil S. Finley, president of International Commodities Export Corporation, a New-York-based marketing firm. "The famous and loud clarion which began to call on us over thirty years ago kept warning us for decade that the world was to starve and that the only way to save it from starvation was to build more and bigger fertilizer plants," he said. Mr. Finley also commented that industry tends to be "oblivious" to the world agricultural market, and acts solely on domestic cemand.

In contrast to the forecasts of food shortages, Mr. Finley pointed out that agricultural output has increased 30 percent in the past twelve years, and prices have fallen. Fertilizer and other raw material production has also shot up 33 percent during this period, he added, in both industrialized and developing economies.

Naturally enough, the industry's oversupply has created poor returns on investment, a situation that will persist due to continued capacity buildup in developing nations, according to John, W. Marshall, fertilizer business area and purchasing director for Imperial Chemicals Industries, PLC. This problem is exacerbated in US and Western Europe, he said, because nitrogen plants, main raw material, natural gas, is expensive compared to many developing countries with industries owned or supported by government.

Toyo Soda Sells Unit To Seydel Companies

Seydel Companies has completed an agreement with AZS Corporation, a subsidiary of Toyo Soda (Japan) to purchase its Seydel-Woolley Textile Warp Size Chemical Division, which Toyo Soda acquired in its merger with AZS in 1980.

AZS president Robert Short says that Toyo Soda's decision to sell its textile sizing business was a result of a corporate realignment of marketing objectives.

HEAVY & AG CHEMICALS

Liquid Alum Producers Post An $8 Off-List Price Increase

Off-list price increases announced by major liquid aluminum sulfate producers may serve to boost margins in a market where prices have steadily eroded since October 1984, when a price hike was last announced.

Last week, General Chemical Corporation, North America's largest alum producer, increased sub-schedule prices by $8 per net ton (dry basis), following a similar announcement by Stauffer Chemical Company a week earlier (CMR, 10/6/86, pg. 33).

General Chemical's increase is effective October 13 on spot orders and as terms allow on contract business. It affects all the company's producing locations East of the Rockies.

General Chemical cites increases in the cost of labor and fringes, aluminous raw materials, transportation and product liability insurance as reasons for the action. American Cyanamid Company, the third major producer, says it is studying the matter.

Producers say price erosion can be attributed to demand that has been flat at best over the past few years, and to increased industry capacity, resulting from the proliferation of small independent producers.

One smaller producer says that in the early 1980's, when alum prices were strong, smaller manufacturers entered the market with relatively little reaction from the major marketers.

SEVERE PRICE EROSION

In recent years, however, the majors have begun reacting, and are said to be sometimes fighting for market share at the expense of profit. Price wars are reportedly occurring in some areas of the Southeast. One source says prices in areas of Georgia have dropped by up to 40 percent over the past two years.

Producers say that some price firming has occurred over the course of the year in isolated pockets where competition has been most severe. Georgia and parts of Florida are cited as having firmed up.

In most areas, however, prices have remained depressed, and most producers say a price increase is necessary. Most hikes will not come until the end of the year, when almost all municipal accounts are re-bid and most pulp and paper accounts are re-negotiated.

Prices to municipal water treatment accounts are set on a lowest bid basis, while prices to the pulp and paper industry vary regionally.

Municipal prices in Georgia can go below $90 per ton, according to one source. To the North of that area, municipal accounts are put in the $105 to $120 per ton range, delivered, with large industrial accounts in that area paying from $100 to $110 per ton f.o.b. plant. Midwest prices are said to be firmer, and tend to run between $10 and $15 per ton off list levels, according to one producer.

Aluminum sulfate demand in 1986 is a matter of debate. Several of the smaller producers who have been in the market for a number of years report that the Commerce Department has only this year begun acknowledging their production for the purpose of compiling statistics.

Recently revised 1985 figures, which take into account the previously missing output, show production for the year to be 1,190,626 tons, as opposed to a formerly reported 1,003,324 tons. Production for the first seven months of 1986 is put at 697,476 tons, down just over 1 percent from the revised figure for the same period last year. Production figures are for liquid and dry alum; the liquid accounts for over 80 percent of the total.

Some producers are skeptical of these figures as well. They claim that drought conditions in the Southeast this Summer have increased alum use in water treatment. One producer notes that the water treatment facilities he is familiar with were working at capacity for much of the Summer.

Likewise, the pulp and paper industry is operating at higher rates this year as compared to last, and many producers feel alum consumption by that industry has also improved.

PRICES TRENDLINES

WEEK ENDING OCT. 10, 1986

CHANGES/UP
Aluminum sulfate (liquid), $8 per ton

CHANGES/DOWN
None

HEAVY & AG INDEX
The Heavy & Ag Chemicals index reflects the prices of 18 representative materials in this sector and the quantity of each produced in 1985.

Oct. 10, 1986	113.69
Oct. 3, 1986	113.69
Sept. 12, 1986	113.69
Oct. 11, 1985	113.69

Chemical Prices Start on Page 40

BASES & SALTS

SODIUM CHLORATE — KemaNord Inc., has announced a new list price for sodium chlorate solution (R-2) of $330 per R-2 unit, f.o.b. Columbus, Miss., freight equalized with the nearest recognized producing point. This new list price is effective immediately on spot sales and on contracts, as terms permit.

An R-2 unit consists of one ton of sodium chlorate and 0.6 tons of sodium chloride.

KemaNord notes that more than 150,000 tons of high cost sodium chlorate capacity has been eliminated in Eastern North America during the past year and this, coupled with the normal growth in consumption, has improved the supply/demand balance considerably.

KemaNord raised sodium chlorate crystal.

FERTILIZER CHEMICAL OUTPUT: JULY

CENSUS BUREAU NUMBERS IN SHORT TONS ON KEY FERTILIZERS.

	JULY	JUNE	JULY '85
Ammonia, syn., anhyd.	1,007,536	1,119,982	1,312,272
Ammonium nitrate	365,739	447,765	555,676
Ammonium nitrate/urea solutions	144,812	151,293	165,965
Monoammonium phosphates	58,228	70,539	124,799
Other ammonium phosphates	48,333	45,910	24,572
Ammonium sulfate	159,022	160,097	174,920
Diammonium phosphate	669,809	645,645	923,657
Nitric acid	446,480	528,224	612,528
Phosphoric acid	692,070	721,428	841,919
Sulfuric acid	2,699,361	2,914,027	3,320,505
Superphosphate, concentrated	149,560	149,791	232,674
Superphosphate, normal & enriched	29,750	9,313	19,142
Superphosphate and other phosphate fert.	955,956	921,186	1,324,841
Urea	421,756	455,569	494,777

HEAVY CHEMICALS

list prices in August (CMR, 8-11-86, pg. 29). Several producers have raised their prices for liquid sodium chlorate

METALS & MINERALS

COPPER — This metal's price has been fluctuating since the end of July. The reason for this, says a producer, is that market conditions are pulling copper's price in two directions.

Copper pricing generally rides on the coattails of precious metals pricing, and with Congress' recent override of President Reagan's veto of South African economic sanctions, platinum, gold and silver prices are rising. This has had a firming effect on copper.

On the other hand, supplies are increasing on the New York and London exchanges. So, says the producer, pricing has moved both up and down. He quotes a price of 82½c. per pound, but notes that the price was [illegible] pound three weeks ago. At the end of [illegible] copper's price was 62c. per pound.

LEAD — Lead prices are firming, attributable to increased battery production for new car models. Battery production, which begins rising in the Fall, accounts for 75 percent of lead demand.

Lead's current price is 24½c. per pound, according to one source. He says that the price has risen steadily since the end of summer, when it was 21c. per pound.

Toxics Rules

Continued from Page 7

ments giving Federal officials the [illegible] power they seek, but the provisions [illegible] cluded in reauthorization legislation [illegible] White House has threatened to veto.

In their appeal, EPA lawyers argued superfund provides the authority to enter private property when necessary to clean [up] hazardous substances. The law gives [EPA] broad powers to clean up abandoned [waste] sites.

"The decision of the court of appeals [frus]trate's EPA's efforts to conduct hazardous waste cleanup actions," the agency told the high court. "The immediate effect of the decision is to halt all efforts to clean up contamination at the Waukegan Harbor site."

Attorneys for Outboard Marine, opposing the appeal, said EPA's plans for the [site] would have a profound effect on the [plant's] 2,000 employees, would disrupt traffic, limit the company's access to its own property, including six acres of a parking lot.

The company also said there is no scientific proof that PCBs in the harbor pose a risk to fish, drinking water or air.

The first phase of EPA's plan for cleanup would involve moving truck-mounted [drilling] rigs, pickup trucks and other equipment [onto] the complex grounds.

In another case, the justices refused to overturn Federal regulations limiting [pollu]tion discharges by the non-ferrous metal [in]dustry into the nation's waterways.

Icahn Pursues USX

Continued from Page 9

years ago, when it rescued Marathon [Oil] Company from a hostile takeover effort [by] Mobil Corporation.

Mr. Icahn has denied that he will seek "greenmail" in this effort, but this [is not] necessarily an irrevocable commitment. [In] greenmail, the target company buys back shares acquired by the raider by paying a large premium. Ferro Corporation, for example, retained its independence by [buying] back a 20 percent stock interest [held by] Crane Corporation, which was seeking to force a merger.

What has made USX — and other [steel] companies, for that matter — vulnerable to takeover has been the declining efficiency of steel operations in the US, both because of high labor rates and the increasing obsolescence of most of the industry's plants — trends that are mutually aggravating.

The companies have responded by diversifying and seeking more specialized [niches in] the steel business, but neither of these strategies has fully compensated for the [loss of] large portions of the basic commodity business.

Target companies who have vowed [to take] whatever steps are necessary to avoid [a hos]tile takeover have been almost always [suc]cessful in recent years. USX management will be strongly motivated in their efforts [by] the fact that Mr. Icahn's policy is to [replace] most of a company's management [with his] own people.

Superfund Showdown

Continued from Page 5

would have to stay in session to override it, and I believe the sentiment among my colleagues to do so is strong."

The President is required to sign into law or veto a bill within 10 days (excluding Sundays) of the date it is formally received at the White House. However, if Congress adjourns during the 10-day period, the President can kill the bill by doing nothing, figuratively keeping the bill "in his pocket."

Both Republicans and Democrats strongly urged the President to reject the veto option during the floor debate.

A veto, says Rep. Norman Lent, R-N.Y., "would be a grave error. It would bring cleanup action at thousands of superfund sites to a halt, and we cannot allow that to happen."

"The American people regard superfund as the environmental issue of the decade," adds Rep. Florio. "A presidential veto of this vital program would demonstrate a monumental insensitivity on the part of the administration to the overwhelming support the toxic waste cleanup program has among the American people, the House and the Senate."

But opponents denounced the bill as "fundamentally flawed" and challenged tax provisions they said would ultimately be added to the price of consumer goods.

It would be inconsistent, said Rep. Hal Daub, R-Neb., for lawmakers who have opposed tax increases to vote for the superfund bill, which would raise taxes on the petroleum industry and order new taxes on all firms with taxable annual income over $2 million.

Shortly before the House vote, Sen. Robert Packwood, R-Ore., and 80 other senators—including 35 Republicans—sent President Reagan a letter, urging him to sign the bill despite the administration's opposition to the tax provisions.

"The continuance of the program is critical to the health and safety of every American," the senators wrote. "We must all compromise. Environmental Protection Agency is desperately in need of funds. We cannot put this program in jeopardy while we continue to debate funding mechanisms."

Senate Republican leader Robert Dole of Kansas told his colleagues there "may be some flexibility" in the White House position if President Reagan is reassured the superfund tax will not be increased in the next few years.

If the President does veto the bill, Sen. Dole added, "I hope he does it promptly, so we can act on it (vote to override) before we leave." Congress plans to adjourn soon so members can campaign for the November elections.

EPA Administrator Lee Thomas has warned that superfund's lack of money means a shutdown is inevitable by year's end unless a new law is enacted before Congress adjourns.

The financing provisions would pay for the program with a broad-based corporate tax to raise $2.5 billion, an 8.2 cent-a-barrel tax on domestic oil to raise $1.25 billion and a higher 11.7 cent-a-barrel levy on imported oil to raise $1.5 billion, a $1.4 billion tax on feedstock chemicals, $1.25 billion from general taxpayer revenues, and $300 million each in cost recoveries from responsible parties and interest from fund monies.

In addition, a 0.1 cent-a-gallon tax on motor fuels would raise $500 million for a separate fund to pay for the cleanup of leaking underground storage tanks.

The American Petroleum Insitiute has denounced the tax on crude oil production as unfair and a coalition of more than 100 manufacturing firms, led by the Grocery Manufacturers of America, oppose the bill because it contains the broad-based tax.

But the chemical industry and environmental groups have endorsed the package.

Acid Rain Theory Posited by NOAA

Ocean upwelling, a process through which deep-ocean water is circulated to the surface,may add more acid rain-producing chemicals to the atmosphere than previously recognized, acording to a scientist with the Commerce Department's National Oceanic & Atmospheric Administration (NOAA).

Dr. F. P. Parungo of the agency's Environmental Research Laboratories in Boulder, Colo., reports heavier concentration of sulfate and nitrate particles suspended in the atmosphere over areas of upwelling in the Pacific Ocean than over other portions of the ocean.

This is the first time a correlation between upwelling and concentrations of sulfate and nitrate particles has been noted, and shows that concentrations of acid rain precursors put into the atmosphere from the oceans varies from place to place, Parungo said.

Reporting in the Journal of Atmospheric Chemistry on a Pacific cruise aboard the NOAA research vessel Discoverer, Dr. Parungo said maximum quantities of acid rain-producing chemicals were found in air samples collected at upwelling locations off the U.S. Pacific coast, along the Equator, and off the Antarctic.

Dr. Parungo said that particles of sea salt-bearing sulfates and nitrates are transported from the ocean into the atmosphere via sea spray of air bubbling at the surface.

The relative concentrations of sea salt components in the air and the sea water are almost identical, but in areas where upwelling is occurring, there can be up to 100 percent more sulfates in the air sample than in the water, and up to 1000 times more nitrates, Dr. Parungo said.

This, she explained, is caused by the ocean spray particles intermingling with sulfur- and nitrogen-containing gasses produced by biological activities in nutrient-rich waters. The gasses escape into the atmosphere where they are converted to sulfate and nitrate particles by photo-chemical reactions.

"These additional particles could serve as cloud condensation nuclei to initiate cloud formation and promote precipitation," Dr. Parungo said.

COATINGS & PLASTICS

PVAc Margins Pressured By Rising Material Costs

Producers of polyvinyl acetate homo- and co-polymers (PVAc), who saw selling prices fall an average of 2 cents per pound over the first half of this year, now have higher raw material costs to contend with as well.

Not only have makers of vinyl acetate monomer (VAM), the key PVAc precursor, posted 2-cent-per-pound price increases for this quarter, but costs for other important intermediates, among them n-butyl acrylate and dibutyl maleate, have gone up 2 to 3 cents per pound this month.

Compounding the problem, polymer producers say, has been further price slippage in specific areas of the US, brought on by overcapacity and aggressive discounting. Since July, in Florida and Chicago and along the West Coast, sublist prices for PVAc have slipped, depending on grade and end use, an additional 1 to 2 cents per pound.

So far, manufacturers have swallowed these higher costs, complaining that the market has been unresponsive to their attempts to pass along higher production costs. This year, several VAM price increases were later withdrawn, and skeptical PVAc customers will need convincing that the recent VAM increases are holding before they will pay more for PVAc.

No PVAc producers have announced price increases, but all complain that price erosion has had a noticeable impact on margins. Over the past nine months, says one producer, VAM prices had come down substantially, but PVAc prices, in response to rampant discounting and a soft economy had come down in excess of any company savings. "Margins were poor enough without the VAM increase," he says, referring to the current situation.

DISCOUNTS STILL THE NORM

Discounts between 10 and 20 percent off list price have become the norm in the PVAc market this year. With discounts, prices for paper grades, which sold between 28 cents and 30 cents per pound in July, are now said to range from 24 cents per pound (for large volume customers) to 29.5 cents per pound, while adhesive grades are selling between 26 cents per pound and 28 cents per pound. Paint-grade prices are uniformly 1 cent per pound lower than they were in July, ranging between 26 cents per pound and 32 cents per pound.

Demand this year has been steady, tracking GNP, and the overall size of the market is expected to grow by 2 to 2.5 percent, to around 1.6 billion pounds. Reflecting current high rates of construction, paint and adhesive demand have grown faster than the market as a whole.

One producer reports that PVAc sales to the paint and coatings industry (including vinyl acrylate and acrylate copolymers) should rise 8 percent over last year's already healthy figure, to 577 million pounds. Others feel that this figure is too high; 4 to 5 percent would be a more accurate description, they say, with between 2 and 2.5 percent of the total accounted for by latex paints.

Paper demand is expected to show 2 percent growth this year, reaching 270 million pounds. Paper makers reportedly have been switching back and forth between PVAc and styrene-butadiene (SB) latex in certain applications where qualities of the two materials overlap. For most of this year, SB latex has been the material of choice.

Although one producer feels that a trend away from use of SB latex has become more pronounced lately, as the paper industry moves away from production of "publication grade" paper, most producers feel that this is only a temporary displacement. SB latex, a lower priced product, will definitely remain the paper industry's favorite, they say.

Together, paint and paper segments traditionally account for 60 percent of the total PVAc market. A fairly flat paper market is expected to bring this figure to 54 percent of the total.

The adhesives market segment is expected to grow between 3 and 5 percent overall, to reach a figure of over 740 million pounds this year.

Total merchant capacity for PVAc, including homopolymer and acrylate copolymers, excluding captive capacity, is said to be between 2 and 2.4 billion pounds per year, with utilization rates quoted between 70 and 75 percent of nameplate.

Within the past five years, several firms have shut down facilities. Last year, Reichhold Chemicals Inc. closed its Tacoma, Wash., plant, but brought an equivalent amount of new capacity on-line through debottlenecking, with no effect on its total capacity or output. Producers say that industry capacity figures have been stable for the past two years.

Last quarter, some producers reported that captive latex facilities of several paint companies had been closed when the firms failed to comply with EPA emission regulations. This had had no impact on merchant demand for PVAc, however, producers say, because affected companies had their latex requirements tolled by other paint manufacturers.

PRICES TRENDLINES

WEEK ENDING OCT. 10, 1986

CHANGES/UP
None

CHANGES/DOWN
None

COATINGS INDEX

The Coatings & Plastics Index reflects the prices of 13 representative materials in this sector and the quantity of each produced in 1985.

Oct. 10, 1986	306.4
Oct. 3, 1986	306.4
Sept. 12, 1986	306.4
Oct. 11, 1985	306.4

Chemical Prices Start on Page 40

PRIME PIGMENTS

ORGANIC PIGMENTS — Producers of phthalocyanine, quinacridone and azo organic pigments report that prices have been stable since July, when increases were posted by all major US manufacturers.

This year, the overall market is expected to grow by 2 percent; producers see revenues reaching $550 million by the end of this quarter.

Demand within the traditional paints and coatings market segment, which currently accounts for around 30 percent of the total market, is expected to mirror the overall market's 2 percent growth.

Plastics applications, which comprise between 20 and 25 percent of the total market, represent a high growth area. Producers expect demand in this portion of the market to grow between 6 and 8 percent this year.

High-solid automotive coatings applications are becoming increasingly important, with many producers concentrating on improving the rheology of quinacridone and phthalocyanine pigments, which have traditionally shown poor flow characteristics.

The Dyes & Pigments Division of Mobay Corporation has recently introduced a new line of improved flow perylene and quinacridone pigments. These products, "Perrindo Maroon" R-6436, "Perrindo Red" R-6424, "Quinto Magenta" RY-6853 and "Quindo Red" R-6713, are said to allow for higher

Continued on Page 56

Chemical Finance

Celanese Canada Boosts Dividend on Preferred Stock

Celanese Canada Inc.'s directors have raised the dividends on the company's two series of preferred shares by about 23 percent to $2.16 per share on the $1.75 series and $1.24 on the $1.00 series, payable December 31 for the full fourth quarter.

At a special meeting of common and preferred holders, approval was given to a series of amendments which make explicit, under terms of the issues, the company's right to repurchase common shares. When the preferreds were issued in 1945 and 1947, Canadian law did not allow companies to buy back common shares. Celanese Canada said that it has not instituted any common share repurchases and has no present plans to do so, but that it wanted to remove any possible impediment to future purchases.

Greenwell Montagu Boosts Montedison, BASF Ratings

Greenwell Montagu Research, of the UK and New York, has lifted its ratings on several companies, including BASF AG, Croda Company, LaPorte Industries PLC and Montedison SPA, and has lowered ratings on Rhone Poulenc and Brent Chemicals.

BASF, formerly rated as a hold/buy is now a straight buy recommendation, and Montedison's shares have been upgraded from sell to hold. Brent, which was hold/buy, has been downgraded to hold, as has Rhone Poulenc.

Unchanged are Greenwell Montagu's hold/buy recommendation for BOC (formerly called British Oxygen Company) and the sell recommendation on L'Air Liquide, of France.

Hanson Industries Selling USI Agribusiness

Sir Gordon White, chairman of Hanson Industries, US arm of Hanson Trust PLC, of the UK, said Hanson has signed a definitive agreement to sell USI Agribusiness Inc. to a Pennsylvania general partnership consisting of Hershey Agritech, Inc. and Meerpohl Limited Partnership for approximately $7.6 million in cash and notes.

For the year ended September 30, USI Agribusiness, formerly a division of US Industries, had sales of approximately $25.7 million and operating results were approximately breakeven.

Ethyl Recommendation Affirmed by E.F. Hutton

E.F. Hutton & Co. is currently recommending accumulation of Ethyl Corporation's shares for short-term investors, but for longer term accounts, Ethyl is rated by Hutton as an average performer. John P. Henry, Hutton's chief chemical analyst, maintains an earnings estimate of $1.35 per share for Ethyl this year, up from 92 cents last year, and the outlook is for $1.60 per share in 1987.

The good earnings gains for Ethyl this year are coming from lead additives and First Colony Insurance Company, with additional gains from the firm's bond portfolio. The company's flame retardant chemicals business continues to show disappointing earnings, but Mr. Henry expects second-half results to be much improved. Ethyl is still incurring one-time expenses in the transfer of its bromine-based flame retardant chemicals production from Sayreville, N.J., to Magnolia, Ark., the Hutton analyst noted.

Mabon, Nugent Is Positive on Chemical Stocks

Magon, Nugent & Co. remains positive on the chemical industry outlook and recommends the shares of some of the industry's major companies despite relatively modest growth in output in recent months. Most sales volumes are satisfactory, while volumes in plastics, textiles, soaps and toiletries have been relatively strong, comments Robert S. Reitzes, Mabon, Nugent's chemical analyst. In addition, capital appropriations are being increasingly applied to productivity improvements, Mr. Reitzes adds.

The Mabon, Nugent chemical analyst recommends an overweighting of the industry's stocks in investors' portfolios. His recommendations include Dow Chemical Company, National Distillers & Chemical Corporation, Rohm and Haas Company, E.I. Du Pont de Nemours & Co. and Hercules Inc.

Chemical ROE Rises in Second Quarter

The average after-tax return on equity for chemical manufacturers in the second quarter advanced to 14.9 percent from 12.8 percent in the previous quarter and 13.4 percent in the same period a year ago, according to the latest report of Census Bureau, Department of Commerce.

For industrial chemicals and synthetics, the results were even better, as the ROE advanced to 18.6 percent from 13.9 percent. In the pharmaceutical industry, returns averaged 19.6 percent, versus 19.8 percent in the previous period and 17.8 percent a year earlier.

The ROE in the petroleum industry recovered from its severe depression, reaching 11.1 percent, as against the 7.5 percent of the previous period and 5.2 percent a year ago. The ROE in rubber was 13.6 percent, up from 8.5 percent in the previous period and 6.1 percent a year ago, Census Bureau said.

Cooper Development Signs Acquisition Contract

Cooper Development Company, a Palo Alto, Calif.-based investor in health care companies, has agreed on final terms for acquiring Cooper LaserSonics Inc., Santa Clara, Calif., a maker of surgical devices.

Securities of Cooper Development valued at $5 will be swapped for each of the 19.4 million Cooper LaserSonics common shares outstanding, in a deal totaling about $95.6 million. The securities to be traded will comprise a package of common and preferred Cooper Development shares.

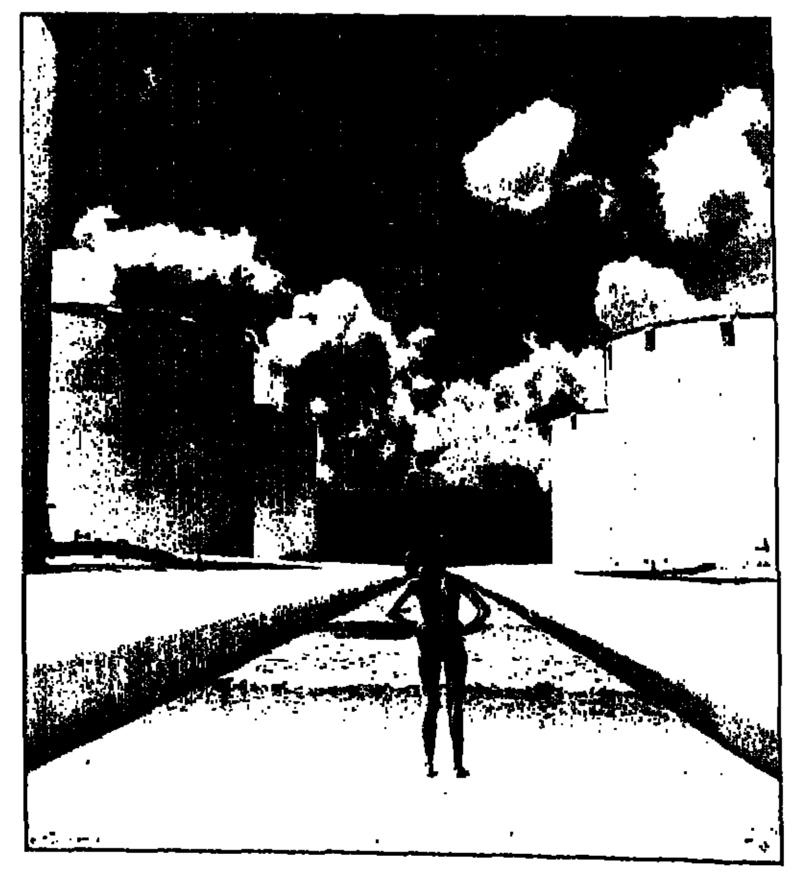
Ferro Is Experiencing Good Earnings Growth

Ferro Corporation expects to report strong year-to-year gains in both sales and earnings for the third quarter ended September 30, Adolph Posnick, president and chief executive officer, told a meeting with security analysts in Los Angeles last week.

Crediting improved market conditions in both the US and Europe, Mr. Posnick said that Ferro should report net income of approximately $6.6 million, or 98 cents per share, on worldwide sales of about $176 million, as compared with $3.4 million and $158.1 million a year ago.

Montedison Wins Control of Milan's Mediobanca

Montedison SpA, Italy's highly diversified producer of chemicals, electric power and a broad range of consumer products and services, has won its fight for control of Mediobanca, a large merchant bank headquartered in Milan. Raul Gardini's Ferruzzi agricultural business, a group friendly to Montedison, raised its stake in Mediobanca from 1.6 percent to 14.5 percent, thereby assuring control to Montedison.



PERFUMES & FLAVORINGS

Vanillin Shift Follows

Continued from Page 1

vanillin at the Freeport, Tex., facilities. "Such a conversion," he says, "would not be that difficult."

Monsanto's sale of its vanillin interests completes the company's departure from the perfumes and flavorings industry. Monsanto's benzyl acetate operations went to Haarmann & Reimer and, before that, an entire flavors and fragrance house was sold to Bush, Boake and Allen.

Prices, supply and demand are not expected to be affected by the Rhone-Poulenc acquisition. According to an aroma chemicals broker, "The purchase will strengthen Rhone-Poulenc's position but it won't change pricing because the competition is still fierce." Prices are considered soft, at $12.35 to $12.50 per kilo shipped, down from a mid-August quote of $13.50 per kilo shipped.

MARKET STILL SOFT

"The market has continued somewhat soft, even though there isn't much vanillin available," another broker says. An importer concurs, and cites the difficulty lower prices present for long-term planning. "We have been pushing, unsuccessfully, for higher prices and have therefore dropped our long-term contracts. Buyers want more than they normally contract for and we have to refuse them."

Spurred on by this buying interest, industry sources look to price increases by January. "Prices will firm gradually and these buyers are trying to beat it," says one source.

ESSENTIAL OILS

ANNATTO EXTRACT — Miles Laboratories, Inc., is increasing prices for annatto food colors, effective immediately.

This increase is on the heels of a September 29 increase. A company spokesman says the move is necessitated by an "extraordinary" increase in cost for bixin seed, the source of the color extract.

The new price for the company's AFC Water Soluble 445 (single-strength) will be $12.30 per gallon on 55-gallon closed-head, non-returnable steel drums; $12.80 in 5-gallon white plastic pails; and $13.80 in four one-gallon plastic bottles in a carton. AFCWS 890 (double-strength) prices, on the same basis, are $26.80, $27.30 and $27.80 per gallon, respectively.

LAUREL LEAF OIL — Laurel leaf oil jumped over 50 percent in the last two weeks from $67 per kilo cost and freight, New York, to $102 to $105, same basis.

Industry sources cite supply problems from Eastern Europe and speculate that the laurel leaf spice situation has caught up with the oil (CMR 9/1/86 p.26). Laurel leaf has climbed from 80c. per pound in mid-August to $3.10 per pound last week.

"It's a very small item," says an essential oils broker, "maybe two or three drums are sold a year."

LITSEA CUBEBA — Spot prices for litsea cubeba oil increased 20c. per pound from $2.30 to $2.50 per pound. The rise in prices is due to restricted supplies and a healthy demand, industry sources say.

"Litsea cubeba is an attractive product when compared to the citral-producing alternatives," says an essential oils broker. "When it is processed into citral," agrees an essential oils importer, "the Chinese litsea cubeba oil has a much higher yield than lemongrass." Yet the Guatemalan lemongrass is comparably priced at $2.35 to $2.60 per pound and reportedly softening.

A market analyst contends that the lack of supplies is the primary force behind the stronger market. "People prefer the Chinese material but there's not enough of it to go around." The broker attributes this sup

Continued on Page 12

PRICES TRENDLINES

WEEK ENDING OCT. 10, 1986

CHANGES/UP

Anise seed, Turkish, 2-3c. per lb.
Citronella Oil, Javan, 10c. per lb.
Citronella Oil, Chinese/South American, 10c. per lb.
Cloves, Madagascar, 17c. per lb.
Geranium Oil, Bourbon, fob, $5 per lb.
Laurel Leaf Oil, $38 per kilo
Laurel Leaves, Turkish, 20c. per lb.
Litsea Cubeba Oil, 20c. per lb.
Nutmegs, West Indian Limed, 10c. per lb.
Orange Butter Oil, shipped, $1 per lb.
Pepper, Brazilian black, 12c. per lb.
Pepper, Lampong black, 13c. per lb.
Pepper, Malabar black, 11c. per lb.
Pepper, Muntok white, 7c. per lb.
Rosewood Oil, Brazilian shipped, 25c. per lb.
Saffron, $10.00 per lb.
Sesame Seed, Central American hulled, 2c. per lb.
Vetivert Oil, Haitian, 50c. per lb.

CHANGES/DOWN

Basil Leaves, Egyptian, 7c. per lb.
Cardamon Oil, shipped, $5 per lb.
Cinnamon Leaf Oil, Ceylonese, 5c. per kilo
Cumin Seed, Turkish, 3c per lb.
Fennel Seed, Indian, 1-3c per lb.
Lime Oil, Haitian, 50c. per lb.
Mustard ground, 3c. per lb.
Turmeric, Jamaican, 8c. per lb.

PERFUMES INDEX

The Perfumes & Flavorings Index reflects the prices of 11 representative materials in this sector and the quantity of each supplied in 1985.

Oct. 10, 1986 .... 71.00
Oct. 3, 1986 .... 71.00
Sept. 5, 1986 .... 71.08
Oct. 4, 1985 .... 71.01

Chemical Prices Start on Page 40.

ESSENTIAL OIL IMPORTS: JULY

SELECTIVE STATISTICS FROM THE CENSUS BUREAU.

		JULY	JUNE	YR TO DATE	[illegible]
Bergamot	lbs.	9,162	3,741	82,766	[illegible]
Bitter Almond	lbs.	----	2,646	6,413	[illegible]
Cassia	lbs.	45,808	34,780	271,852	[illegible]
Cedarleaf	lbs.	3,507	802	9,820	[illegible]
Cinnamon	lbs.	15,520	110	82,742	[illegible]
Citronella	lbs.	82,843	103,968	645,824	[illegible]
Clove	lbs.	211,863	162,204	776,829	[illegible]
Cornmint	lbs.	36,618	14,878	157,358	[illegible]
Eucalyptus	lbs.	202,978	70,945	366,432	[illegible]
Geranium	lbs.	5,390	2,154	72,067	[illegible]
Lavenders	lbs.	5,280	21,421	87,899	[illegible]
Lemon	lbs.	97,349	166,864	1,236,632	[illegible]
Lemongrass	lbs.	20,275	275	82,755	[illegible]
Lime	lbs.	131,739	84,155	771,981	[illegible]
Neroli	lbs.	43	48	9,581	[illegible]
Nutmeg	lbs.	7,565	11,172	193,339	[illegible]
Orange	lbs.	290,423	303,570	4,946,392	[illegible]
Orris	lbs.	37	190	1,916	[illegible]
Patchouli	lbs.	66,357	91,975	426,789	[illegible]
Peppermint	lbs.	----	62,301	693	[illegible]
Petitgrain	lbs.	25,583	63,905	168,165	[illegible]
Pine Needle	lbs.	12,085	----	19,965	[illegible]
Rose	lbs.	1,527	33,783	61,884	[illegible]
Rosemary	lbs.	2,756	13,619	34,221	[illegible]
Sandalwood	lbs.	7,599	281	[illegible]	[illegible]
Thyme	lbs.	994	3,208	18,193	[illegible]
Vetivert	lbs.	22,087	12,736	138,661	[illegible]
Ylang Ylang or Cananga	lbs.	3,984	6,464	[illegible]	[illegible]

CHEMICAL IMPORTS

US imports of chemicals and related materials are reported in this section by CPI material. Listings include consignee where possible, container, net weight, name of vessel (in parenthesis), port of origin and date of shipment's arrival in New York or the Port of Newark.

US chemical imports/exports are tabulated monthly in the market reports.

A-B

3 AMINO 4 METHOXY BENZANILIDE H & C Ind 20 dms (2557 lbs) (Ever Gather) Kaohsiung, 9/7.
ACETAMINOPHEN Proses Products 36 dms (3452 lbs) (Mercandian Admira) Istanbul, 9/7.
ACETATE LINALYL SYNTHETIC 79 pkg (33614 lbs) (Atlantic Saga) LeHavre, 9/1.
ACETONITRILE 160 dms (60671 lbs) (Ming Propitious)Kaohsiung, 9/2.
ACID ORANGE China Interocean Transport 280 dms (19519 lbs) (Chao He) Shanghai, 9/2.
ACID THIOGLYCOLIC Carstab 64 dms (41341 lbs) (Sea Land Voyager) Bremerjhaven, 9/4.
Evans Chemetics 78 dms (44882 lbs) (Sea Land Express) Bremerhaven, 8/22.
ACID YELLOW DYESTUFFS Organic Chemical 10 dms (1270 lbs) (Addiriyah) Dubai, 9/10.
ACRYLONITRILE BUTADIENE RUBBER Alba Fwdg 684 brl (40212 lbs) (Nedlloyd Clement) Tokyo, 9/5.
486 bls (40040 lbs) (Neptune Coral) Kobe, 9/5.
486 bls (40040 lbs) (Neptune Coral) Yokohama, 9/5.
AGAR AGAR American Shpg 80 bgs (4621 lbs) (Imperial) Valparaiso, 9/5.
California Shpg Line 52 ctn (0 lbs) (Hanjin New York) Hong Kong, 9/4.
CGM French Line 250 bgs (22211 lbs) (Atlantic Saga) LeHavre, 9/1.
Chart 20 dms (2205 lbs) (Ever Gather) Osaka, 9/7.
AGAR AGAR EXTRACT Global Imports 50 dms (5842 lbs) (Americana) Cadiz, 9/5.
ALLEPPEY FINGER TURMERIC Rue Fwdg 96 bgs (13409 lbs) (Sea Land Voyager) Rotterdam, 9/4.
ALUMINIUM OXIDE Treibacher 1240 bgs (118361 lbs) (Dart Americana) Bremerhaven, 9/9.
ALUMINUM CHLORIDE ANHYDROUS Fluka Chemical 62 dms (8369 lbs) (Atlantic Saga) Le Havre, 9/1.
AMMONIUM BIFLUORIDE 724 bgs (36998 lbs) (Zim New York) Osaka, 9/5.
AMMONIUM SULFAMATE Atlas Intermodal Transport 900 bgs (45269 lbs) (Ming Propitious) Keelung, 9/2.
AMMONIUM THIOCYANATE CHEMPURE Akzo Chemie 640 bgs (36665 lbs) (Husum) Hamburg, 9/11.
ANILINE 2 4 DISULFONIC ACID Silvey Shpg 125 bgs (7200 lbs) (Ming Propitious) Kobe, 9/2.
ANILINE 2 4 DISULFONIC ACID 150 bgs (8532 lbs) (Ever Gather) Osaka, 9/7.
ANISE Louis Furth 600 sks (39604 lbs) (Colombo) Valencia, 9/12.
ANTIMONY METAL INGOTS Minor Metals 100 bxs (23149 lbs) (American Virginia) Hong Kong, 9/5.
Daniel F Young 2400 bgs (119910 lbs) (Chao He) Kobe, 9/2.
Minor Metals 54 pkg (123810 lbs) (American Virginia) Hong Kong, 9/5.
ARABIC GUM Colloides Naturals 720 bgs (80954 lbs) (Sea Land Express) Rotterdam, 8/22.
ARSENIC United Mineral & Chemical 17 ctn (1135 lbs) (Nedlloyd Clement) Tokyo, 9/5.
ASCORBIC ACID Blaiklock Brothers 400 dms (25132 lbs) (Leda Maersk) Kobe, 9/18.
ASPIRIN Proses Products 729 dms (85984 lbs) (Mercandian Admira) Istanbul, 9/7.
ATACTIC POLYPROPYLENE U S Intec 2120 blk (158731 lbs) (Aldebaran) Rotterdam, 9/4.
BARIUM CARBONATE PRECIPITATED Prescott 4760 bgs (265496 lbs) (Leda Maersk) Kobe, 9/18.
BARIUM SULPHATE PRECIPITATED E Z Em 3360 bgs (190067 lbs) (American Resolute) Genoa, 9/8.
BARIUM SULPHATE X RAY GRADE Ore & Chemical 800 bgs (45609 lbs) (Ever Laurel) Antwerp, 9/9.
BASIL R T French 400 bgs (29903 lbs) (Zim Hong Kong) Piraeus, 9/9.
BEESWAX Koster Keunen 4 plt (4647 lbs) (Husum) Rotterdam, 9/11.
Robert S Baldini 100 bgs (11052 lbs) (Imperial) Valparaiso, 9/5.
BENZOGUANAMINE James E Fox 881 bgs (44438 lbs) (Ever Laurel) Hamburg, 9/9.
BENZOYL CHLORIDE Marlborough Chemicals 1 tnk (52910 lbs) (Elvira Oria) Rotterdam, 9/9.
BENZOYL PEROXIDE Agrichem 212 dms (21967 lbs) (Aldebaran) Felixstowe, 9/4.
BENZYL ALCOHOL Marlborough Chemicals 1 tnk (5071 lbs) (Elvira Oria) Rotterdam, 9/9.
BENZYL ALCOHOL ASPARTAME CDF Chimie 1 tnk (40521 lbs) (Aldebaran) LeHavre, 9/4.
BENZYL ALCOHOL PHOTO GRADE L S Russel Chemicals 78 dms (36982 lbs) (Aldebaran) Rotterdam, 9/4.
BENZYL BENZOATE Unimodal 32 dms (15520 lbs) (Dart Continent) Felixstowe, 9/11.
BETA HYDROXYNAPHTHOIC ACID Mersant Intl 460 bgs (26984 lbs) (Ming Propitious) Kobe, 9/2.
159 dms (33834 lbs) (Falmouth Bay) Bremerhaven, 9/4.
Ueno Fine Chemical Ind 700 bgs (31482 lbs) (Ming Propitious) Kobe, 9/2.

C-D

CADMIUM OXIDE 400 dms (19958 lbs) (Aldebaran) Antwerp, 9/4.
CADMIUM PIGMENT Whittaker Clark & Daniels 16 dms (1111 lbs) (Dart Continent) Felixstowe, 9/11.
CAFFEINE ANHYDROUS Helm New York Chemical 500 dms (29763 lbs) (Chao He) Kobe, 9/2.
CALCIUM CARBONATE HEAVY De Zaan 1200 bgs (40728 lbs) (Ever Laurel) Rotterdam, 9/9.
CALCIUM HYPOCHLORITE Sinochem 310 dms (34172 lbs) (Chao He) Shanghai, 9/2.
CALCIUM HYPOPHOSPHITE 45 dms (5243 lbs) (Dusseldorf Express) Bremerhaven, 9/2.
CAMPHOR POWDER Richardson Vicks 1000 ctn (69526 lbs) (Chao He) Shanghai, 9/2.
CAMPHOR TECH PURE FLAKES 400 cs (22972 lbs) (Dusseldorf Express) Bremerhaven, 9/2.
CAPRYLIC ACID Votainer Consolidation Servl 10 dms (45645 lbs) (Numberg Express) Rotterdam, 9/9.
CAUSTIC POTASH FLAKES 800 bgs (41323 lbs) (Elvira Oria) Rotterdam, 9/9.
CAUSTIC SODA 860 bgs (48901 lbs) (Sea Land Pacer) Algeciras, 9/2.
CELERY SEEDS Attari Brothers 245 bgs (32408 lbs) (Addiriyah) Dubai, 9/10.
Franklin Trdg 200 bgs (26455 lbs) (Addiriyah) Dubai, 9/10.
Fritzsche Dodge & Olcott 420 bgs (55556 lbs) (Addiriyah) Dubai, 9/10.
Gel Spice 200 bgs (26455 lbs) (Addiriyah) Dubai, 9/10.
CHLORAL HYDRATE Ceres Chemical 134 dms (9453 lbs) (American Virginia) Hong Kong, 9/5.
CHOLINE BITARTRATE NF Max Gruenhut 100 dms (11949 lbs) (Atlantic Star) Rotterdam, 9/8.
CITRIC ACID ANHYDROUS A J Murray 1440 bgs (72721 lbs) (Ever Gather) Kaohsiung, 9/7.
Amalgamated Metal 700 bgs (39161 lbs) (American Virginia) Kobe, 9/5.
American Shpg 700 bgs (39161 lbs) (Chao He) Shanghai, 9/2.
D Hauser 1560 bgs (80014 lbs) (Husum) Hamburg, 9/11.
CITRIC ACID MONOHYDRATE Amalgamated Metal 2100 bgs (117480 lbs) (American Virginia) Kobe, 9/5.
American Shpg 700 bgs (39161 lbs) (Chao He) Shanghai, 9/2.
CYANURIC CHLORIDE Lonza 320 dms (40071 lbs) (Numberg Express) Rotterdam, 9/9.
CYCLOHEXANONE SURFACTANTS Autotype 2 bxs (1393 lbs) (Atlantic Companion) Liverpool, 9/8.
CYCLOHEXYLAMINE PURE Janel Intl Fwdrs 76 dms (33761 lbs) (Dusseldorf Express) Antwerp, 9/2.
CYCLOOCTADIENE Biddle Sawyer 1 tnk (42417 lbs) (Hreljin) Marseille, 9/9.
DEXTRIN TCI Carriers 9 dms (1493 lbs) (American Lynx) Rotterdam, 9/4.
DEXTROSE MONOHYDRATE Ce De Candy 3405 bgs (37928 lbs) (Husum) Rotterdam, 9/11.
DIACRYL NON RESTRICTED CFS Intl 5 pkg (2425 lbs) (Dart Continent) Felixstowe, 9/11.
DIALLYL PHTHALATE PREPOLYMER Nichimen 800 bgs (42328 ls) (Nedlloyd Clement) Kobe, 9/5.
DIANISIDINE DIHYDROCHLORIDE Nagase America 190 dms (31550 lbs) (Ming Propitious) Kobe, 9/2.
DICHLOROBENZOYL PEROXIDE Express Consolidation System 4 pkg (3144 lbs) (Atlantic Saga) LeHavre, 9/1.
DICHLORODIFLUOROMETHANE Kali Chemie 1 tnk (41887 lbs) (Colombo) Barcelona, 9/12.
DICUMYL PEROXIDE Montedison 44 dms (20977 lbs) (Colombo) Genoa, 9/12.
DICYCLOHEXYL CARBODIIMIDE Bristol Myers 41 cs (2650 lbs) (Leda Maersk) Tokyo, 9/18.
DICYCLOPENTADIENE Trafpak 1 tnk (41931 lbs) (Leda Maersk) Tokyo, 9/18.
DIETHYL MALONATE Kay Fries 78 brl (36526 lbs) (Kazimierz Pulaski) Bremerhaven, 9/13.
DIETHYL PHTHALATE 76 dms (42558 lbs) (Ever Superb) Leghorn, 9/11.

E-G

EPHEDRINE ANHYD FUSED COARSE 4 cs (231 lbs) (Numberg Express) Bremerhaven, 9/9.
EPHEDRINE 250 dms (29762 lbs) (Numberg Express) Bremerhaven, 9/9.
EPHEDRINE HCL POWDER 20 dms (2456 lbs) (Numberg Express) Bremerhaven, 9/9.
ETHYL SALICYLATE Unimodal 14 dms (7407 lbs) (McKinney Unimodal 14 dam (74074 lbs) (Dart Continent) Felixstowe, 9/11.
EUCALYPTOL Cenifor Mfg 15 dms (6541 lbs) (Nedlloyd Clement) Tokoy, 9/5.
FLUORBORIC ACID Atlantic Container Line 1 tnk (36274 lbs) (Numberg Express) Bremerhaven, 9/9.
FLUORIC ACID Mobay Chemical 1 tnk (32848 lbs) (Falmouth Bay) Bremerhaven, 9/4.
FLUOROANILINE Olin 124 dms (6614 lbs) (Dart Americana) Antwerp, 9/9.
FLUOROCARBON POLYMER Schenkers Intl Fwdrs 90 dms (17857 lbs) (Nedlloyd Clement) Tokyo, 9/5.
FLUOROCARBON POLYMERS Viking Sea Freight 660 dms (26034 lbs) (Nedlloyd Clement) Kobe, 9/5.
FORMALDEHYDE SOLUTION 1 ctn (71 lbs) (Dusseldorf Express) Greenock, 9/2.
G SALT MOIST Ciba Geigy 74 dms (21698 lbs) (Dusseldorf Express) Hamburg, 9/2.
GARLIC Antoine Salim Joseph 1450 cs (35164 lbs) (Sea Land Pioneer) Alicante, 9/9.
Gesnar Brutus 4309 cs (104196 lbs) (Sea Land Pacer) Algeciras, 9/2.
Guadasol Import & Exports 1274 cs (30896 lbs) (Sea Land Pacer) Algeciras, 9/2.
Salim Joseph Antoine 1506 pkg (34862 lbs) (Sea Land Pacer) Algeciras, 9/2.
Villedrouin Philip 1450 cs (35164 lbs) (Sea Land Pacer) Algeciras, 9/2.
GELATIN Corbett Intl 800 dms (187632 lbs) (Ever Superb) Fos, 9/11.
Croda 170 dms (33356 lbs) (Aldebaran) Felixstowe, 9/4.
O C Lugo 111 dms (28675 lbs) (Aldebaran) Felixstowe, 9/4.
Corbett Intl 30 dms (7044 lbs) (Zim Hong Kong) Barcelona, 9/9.
Peter Cooper 212 dms (49775 lbs) (Ever Spring) Fos, 9/3.
GLYCERINE Manuel Del Valle 1 tnk (45900 lbs) (Sea Land Express) Rotterdam, 8/22.
Ore & Chemical 126 dms (75062 lbs) (Almirante Jose Pal) Buenaventura, 9/2.
GLYCIDYL METHACRYLATE Marubeni America 76 dms (36707 lbs) (Chao He) Kobe, 9/2.
GLYCINE TECHNICAL GRADE 150 dms (32077 lbs) (McKinney Maersk) Tokyo, 9/4.
GLYCOXYLIC ACID 68 dms (40476 lbs) (Dart Americana) LeHavre, 9/9.
GRAPHITE Asbury Graphite Mills 900 bgs (122108 lbs) (Vishva Parag) Algeciras, 9/7.
Asbury Graphite Mills 700 bgs (38998 lbs) (American Michigan) Salvador, 9/7.
GUANIDINE HYDROCHLORIDE 625 mix (59291 lbs) (Ever Laurel) Hamburg, 9/9.
GUAR GUM Karl Schroff 795 bgs (40545 lbs) (Alva Maersk) Dubai, 9/10.
Tic Gums 88 bgs (44101 lbs) (Neptune Coral) Singapore, 9/5.
Celanese 720 bgs (40000 lbs) (Vishva Parag) Algeciras, 9/7.
Ampak 1764 bgs (89564 lbs) (American Lynx) Karachi, 9/4.
Premcem Gums 800 bgs (40565 lbs) (Neptune Coral) Singapore, 9/5.
GUM ARABIC Colloides Naturels 720 bgs (80954 lbs) (Sea Land Voyager) Rotterdam, 9/4.
GUM BENZOIN 12 crt (2884 lbs) (Dusseldorf Express) Hamburg, 9/2.
GUM KARAYA SIFTINGS Celanese 1 con (38360 lbs) (Falmouth Bay) Felixstowe, 9/4.
GUM TALHA Naarden Intl 40 bgs (8995 lbs) (Sea Land Voyager) Bremerhaven, 9/4.
GUM TURPENTINE WATER Reimer Martens 1 tnk (36663 lbs) (American Michigan) Paranagua, 9/7.

H-K

H ACID Nagase America 250 bgs (13752 lbs) (Ming Propitious) Kobe, 9/2.
H ACID DRY Ciba Geigy 157 dms (37381 lbs) (Numberg Express) Hamburg, 9/9.
H F HYDROFLUORIC ACID New Wave Transport 141 dms (77780 lbs) (Zim New York) Osaka, 9/5.
HENNA Kakkar Intl 200 bgs (22046 lbs) (Addiriyah) Dubai, 9/10.
HEPTANOIC ACID 6 con (247312 lbs) (Ever Spring) Fos, 9/3.
2 bks (82584 lbs) (Zim Hong Kong) Barcelona, 9/9.
2 tnk (86493 lbs) (Zim Hong Kong) Barcelona, 9/9.
4 tnk (175618 lbs) (Addiriyah) Fos, 9/10.
1 con (20100 lbs) (Express) Marseille, 9/15.
4 tnk (179146 lbs) (Ever Spring) Fos, 9/3.
HERBS Atlantis Line 2 ctn (0 lbs) (Chao He) Kobe, 9/2.
HEXANES Fluka Chemical 1 bxs (26 lbs) (Sea Land Voyager) Rotterdam, 9/4.
HYDRATED HYRAZINE 160 dms (74888 lbs) (Ever Superb) Fos, 9/11.
HYDROCARBON RESIN Panalpina 700 bgs (39198 lbs) (American Virginia) Kobe, 9/5.
HYDROCHLOROTHIAZINE Apotex 40 dms (2557 lbs) (Chao He) Shanghai, 9/2.
HYDROFLUORIC ACID BDP Intl 136 dms (73458 lbs) (Zim New York) Osaka, 9/5.
Trans World Shpg 144 dms (77776 lbs) (Ming Propitious) Kobe, 9/2.
HYDROGENATED CASTOR OIL Henkel 800 bgs (40000 lbs) (Punta Malvinas) Santos, 9/4.
HYDROLYXED PLANT PROTEIN Natural Nydegger Transports 120 pkg (7540 lbs) (Atlantic Star) Lehavre, 9/8.
HYDROQUINONE Rhone Poulenc 720 bgs (41072 lbs) (Alva Maersk) Marseille, 9/10.
HYDROXY STEARIC ACID 2000 bgs (102051 lbs) (Punta Malvinas) Santos, 9/4.
HYDROXYETH HYDRPROPDIME AMMONIUM 71 dms (32950 lbs) (Atlantic Saga) Rotterdam, 9/1.
HYDROXYLAMINE SULPHATE GOODS Virginia Chemicals 720 bgs (40992 lbs) (Husum) Rotterdam, 9/11.
HYPER PURE SILICIUM WSC 8 plt (5168 lbs) (Numberg Express) Hamburg, 9/9.
HYTREL POLYESTER ELASTOMER Sardo & Horgan Distr 720 bgs (126191 lbs) (Ever Laurel) Antwerp, 9/9.
IRON OXIDE Trans World Shpg 720 bgs (40454 lbs) (Aldebaran) Felixstowe, 9/4.
IRON PERCHLORIDE Mallinckrodt 10 dms (2359 lbs) (Sea Land Voyager) Bremerhaven, 9/4.
IRON SULFATE 240 dms (28265 lbs) (Ever Laurel) Hamburg, 9/9.
ISOBORNYL ACETATE Polarome Mfg 63 dms (30278 lbs) (Husum) Rotterdam, 9/11.
ISOBUTYL METHACRYLATE MONOMER Heemsoth Kemer 78 dms (35252 lbs) (Dart Continent) Felixstowe, 9/11.
ISOETHYL ACETATE Unimodal 4 dms (1675 lbs) (Dart Continent) Felixstowe, 9/11.
ISOMERS TOLUENE DIISOCYANATE Montedison 66 dms (39431 lbs) (American Resolute) Genoa, 9/8.
ISONONANOIC ACID 312 dms (145134 lbs) (Clarence) Antwerp, 9/10.
ISOPHTHALIC ACID Ashland Chemical 20 bbg (40587 lbs) (Ever Superb) Leghorn, 9/11.
ISOPHYTOL 1 tnk (43519 lbs) (Atlantic Star) Rotterdam, 9/8.
ISOPROPYLTHIOXANTONE 10 dms (1213 lbs) (Atlantic Saga) Rotterdam, 9/1.
KORINTJI CASSIA A A Kazemi 200 bgs (22,487 lbs) (Leda Maersk) Singapore, 9/18.
l-CYSTEINE HCL MONOHYDRATE 10 dms (1,190 lbs) (McKinney Maersk) Tokyo, 9/4.
l-TRYPTOPHANE Mitrans 42 ctn (5,114 lbs) (Neptune Coral) Kobe, 9/5.

L-N

LANOLIN OIL 231 dms (109,799 lbs) (Zim New York) Osaka, 9/5.
LEAD ACETATE 3 HYDRATE 4 dms (463 lbs) (Dusseldorf Express) Bremerhaven, 9/2.
LEAD ACETATE LEAD NITRATE Universal Transcontinental 12 dms (1,296 lbs) (McKinney Maersk) Kobe, 9/4.
LEMON OIL Fritzsche Dodge & Olcott 20 dms (6,940 lbs) (Elma Cinco) Buenos Aires, 7/29.
20 dms (8,433 lbs) (San Martin I) Montevideo, 9/3.
TCI Carriers 4 dms (1,746 lbs) (American Lynx) Rotterdam, 9/4.
LIME OIL 10 cyl (4,473 lbs) (Imperial) Callao, 9/5.
25 dms (11,241 lbs) (Arc Aeolos) Callao, 9/8.
LINALOL SYNTHETIC 79 dms (33,614 lbs) (Atlantic Saga) Le Havre, 9/1.
LINALOOL & LINALYL ACETATE 80 dms (33,663 lbs) (Ming Propitious) Yokohama, 9/2.
LYCASIN Roquette 1410 ctn (27,267 lbs) (Sea Land Voyager) Rotterdam, 9/4.
MAGNESIUM P NITROBENZYLMALONATE Lonza 82 bgs (4,936 lbs) (Dusseldorf Express) Bremerhaven, 9/2.
MAGNESIUM SULPHATE ANHYDROUS Potash Import & Chemical 800 bgs (80,668 lbs) (Numberg Express) Bremerhaven, 9/2.
MALABAR BLACK PEPPER Koospol 843 bgs (101,358 lbs) (Sea Land Voyager) Rotterdam, 9/4.

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CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

This chemical prices section contains spot quotations and/or list prices of suppliers of chemicals and related materials on a New York or other indicated basis. The listings are based on price information obtained from suppliers. Note that posted prices do not necessarily represent levels at which transactions actually may have occurred. They do not represent bid and asked prices, nor a range of prices over the week. Price ranges may represent quotations of different suppliers as well as differences in quantity, quality and location. All matters under this heading are fully covered by copyright.

An index of weekly chemical market reports is on the back cover.

A

Abies siberica oil, cns. . . . . lb.	15.00	-
Acetaldehyde, 99%, tanks, frt. alld. lb.	.37	-
Prices 1c. higher in West.		
Acetaminophen (see N-Acetyl-p-aminophenol)		
Acetanilide, tech, flaked, bgs, t.l., f.o.b. works. . . . . lb	1.29	-
Acetic acid, tech, tanks, divd. E . . . lb.	.25	-
Acetic anhydride, tanks, divd. E . . . lb.	.43½	-
Acetic anhydride prices 1c. higher in West.		
Acetoacetanilide, dms, t.l., divd. . . lb.	1.29	-
Acetoacet-o-anisidide, dms., t.l., divd. . . . . lb.	2.70	-
Acetoacet-o-chloroanilide, dms., t.l., divd. . . . . lb.	2.85	-
Acetoacet-o-toluidide, dms., t.l., divd. . . . . lb.	1.58	-
Acetoacet-m-xylidide, dms., t.l., divd. . . . . lb.	3.33	-
Acetone, tanks, divd. E. . . . . lb.	.25	-
divd. Zone 2 (Calif.) . . . . . lb.	.27	-
divd Zone 3 (W. of Rockies excluding Calif.) . . . . . lb.	.27	-
Acetonitrile, tanks, frt. alld. . . . . lb	.53	.54½
Acetophenetidin (see Phenacetin).		
Acetophenone, tech., tanks, f.o.b. works. . . . . lb.	.76	.85
perfume grade, extra cns. . . . . lb.	2.15	-
N-Acetyl-p-aminophenol, c.l., t.l. works. . . . . kilo	5.95	6.64
Acetylene black, imp., 50% compressed, 12½-lb. bgs. c.l., t.l. frt. extra. . . . . lb.	.98	-
100%, 25-lb. bgs., same basis . . . . . lb.	.85½	-
Acetylene tetrabromide, tanks, f.o.b. works. . . . . lb.	.97	-
Acetylsalicylic acid, USP (see Aspirin).		
Acetyltributyl citrate, bulk, f.o.b. works. . . . . lb.	1.28	-
Acetyltriethyl citrate, bulk, f.o.b. works . . . . . lb.	2.06	-
Acrolein, tech, tanks, works. . . . . lb.	.62	-
Acrylamide, solid, t.l. works. . . . . lb.	1.00	-
soln., 100% basis tanks, works. . lb.	.74	.77
Acrylic acid, glacial, reg., tanks, divd. . . . . lb.	.67	-
tech., tanks, frt. alld. . . . . lb.	.60	-
Acrylonitrile, tanks, works. . . . . lb.	.39½	.45½
Acrylonitrile-butadiene-styrene resin, high-impact, nat., t.l., dms., divd. . . . . lb.	1.09	1.12
medium-impact, nat., same basis lb.	1.05	1.08
low-impact, nat., same basis lb.	.98	1.01
Adipic acid, resin grade, bulk, hopper cars, frt. equald. . . . . lb.	.57	-
bgs., t.l., c.l. frt. equald. . . . . lb.	.59	-
Agar USP, powd., 60 to 100 mesh., dms. . . . . lb.	9.50	9.85
Alcohol, syn. C-6 to C-10, tanks, f.o.b. works. . . . . lb.	.38	-
C-12 to C-13, tanks, divd. . . . . lb.	.57	.59
C-14 to C-15, tanks, divd. . . . . lb.	.57	-
C-16 to C-18, tanks, divd. . . . . lb.	.60	-
Aldehyde, C-6, dms. . . . . lb.	4.10	5.70
C-7, dms. . . . . lb.	1.95	-
C-8, dms . . . . . lb.	4.30	6.30
C-10 dms. . . . . lb.	4.30	5.35
Algin (see Sodium alginate.)		
Alkali blue, dry, flushed, 110-lb. dms, divd. . . . . lb.	3.72	3.83
Alkali blue prices 1c. higher W. of Rockies.		
Allspice Guatemalan / Honduran, bgs. . . . . lb.	.87	-
Jamaican, bgs . . . . . lb.	1.05	-
Allyl alcohol, tanks, f.o.b., Bayport, Tex. . . . . lb.	.90	-
Allyl bromide, 500-kilo dms. 2,000 lbs. or more, works . . . . . lb.	5.50	-
Allyl caproate, 25-lb cns. . . . . lb.	3.90	4.50
Allyl chloride, tanks, f.o.b. works. . lb.	.65	-
Allyl isothiocyanate, bots. . . . . lb.	5.40	6.90
Almond oil, artif., bitter (see Benzaldehyde.)		
Almond oil, nat. bitter, NF f.f.p.a. bots . . . . . lb.	3.50	3.00
sweet . . . . . lb.	1.24	1.50
Aloe, Cape, cs . . . . . lb.	2.00	-
powd., cs . . . . . lb.	2.25	2.75
Curacao, kgs. . . . . lb.	2.60	-
powd., kgs . . . . . lb.	3.00	-
Alum, NF, dms. . . . . lb.	6.00	6.70
Alum, ammonium, tech. gran., bgs., c.l., t.l., works . . . . . 100 lb.	35.00	-
FCC powd., fiber dms., works 100 lbs.	55.00	-
Alum, potassium, tech. gran bgs., c.l., t.l., works . . . . . 100 lbs.	35.00	-
FCC powd fiber dms., works. 100 lbs	55.00	-
Alumina, activated, gran., 100-lb. bgs., 40,000-lb. min. c.l., works. ton	821.00	-
calcined, bulk, same basis . . . . . ton	354.00	-
100-lb. bgs., same basis . . . . . ton	380.00	-
hydrated, white, bulk, same basis . . . . . ton	190.00	-
100-lb. bgs., same basis . . . . . ton	224.00	-
Aluminum acetate, basic, dms., l.c.l., works. . . . . lb.	3.25	-
Aluminum chloride, anhyd., soln., 500-600 lb. dms., c.l., t.l., works, frt. equald. . . . . lb.	.53	-
bulk, same basis . . . . . lb.	.48	-
semi-bulk bins, same basis . . . . . lb.	.52	-
Aluminum chloride, coml., soln., 32° tanks, works . . . . . 100 lbs.	15.00	-
ret. dms., c.l., works . . . . . 100 lbs.	12.00	-
non-ret. dms., same basis . 100 lbs.	20.00	-
Aluminum formate, dibasic, liq. 8% Al_2O_3 t.l., works . . . . . lb.	.65	-
Aluminum hydrate (see Alumina, hydrated)		
Aluminum hydroxide, dried, gel, NF, 75-lb. dms., c.l., t.l., works. lb.	2.75	3.50
Aluminum metal, 99½% or more, 50-lb. pigs., 30,000-lb. lots, frt. alld. . . . . lb.	.76	-
Aluminum oxide amorphous (see Alumina, calcined).		
Aluminum paste, leafing grade, std., lining, 2,400 lb. lots, divd. . . . . lb.	1.40	-
lining, extra-fine, same basis . . . . lb.	1.99	2.14
Aluminum phenolsulfonate, purif., 100-kilo dms., t.l. . . . . kilo	6.46	-
Aluminum powder, leafing grade, std. lining, 2,400 lb. lots, divd. . lb.	3.17	-
extra fine, lining, same basis . . . . lb.	4.04	-
Aluminum stearate, bgs., c.l. . . . . lb.	1.25	1.37
Aluminum sulfate, coml., grd., 100 lb. bgs., c.l., works, frt. equald., basis 17% Al_2O_3 East and Gulf Coasts . . . . . ton	205.00	-
West Coast . . . . . ton	220.80	-
liq., tanks, N.E. same basis . . . . ton	145.00	-
iron-free, dry, bgs., c.l. same basis . . . . . ton	300.00	-
liq., tanks, same basis . . . . . ton	225.00	265.00
Aluminum sulfate, USP, gran., dms. lb.	-	.337
Aminoacetic acid, USP, dms., 20,000 lbs., f.o.b. works. . . . . lb.	2.12	-
tech., t.l., same basis. . . . . lb.	1.88	-
p-Aminobenzoic acid, 1,000 kilos or more, dms., f.o.b. works . kilo	9.60	10.10
2-Amino-4-chlorophenol dry and grd., 14,000 lbs. or more, frt. alld. lb.	5.79	-
Aminoethyl ethanolamine, tanks, frt. collect. . . . . lb.	1.33½	-
N-Aminoethyl piperazine, tanks, f.o.b., frt. collect. . . . . lb.	1.05	-
2-Amino-2-ethyl-1,3-propanediol dms., t.l. f.o.b. works. . . . . lb.	1.82	-
2-Amino-2-methyl-1-propanol, 95%, dms., c.l., t.l., f.o.b. works . lb.	.95	-
tanks, f.o.b. works. . . . . lb.	.89	-
o-Aminophenol, dms., f.o.b. Charlotte, N.C. . . . . lb.	3.95	-
p-Aminophenol, t.l. dms., f.o.b. Raleigh, N.C. . . . . kilo	7.15	-
p-Aminosalicylic acid, USP, 50-kilo dms., t.l. . . . . kilo	18.50	-
Ammonia, anhyd., fertilizer, wholesale, tanks, divd. Midwest terminals . . . . . ton	165.00	170.00
tankcars, f.o.b. Gulf Coast. . . ton	80.00	85.00
aqueous, 29.4% NH_3, anhyd. basis, tanks, frt. equald. E. of Rockies. . . . . ton	260.00	315.00
Ammoniacal liquor (see Ammonia, aqueous).		
Ammoniac sal, galvanizing grade, bgs., c.l., f.o.b. works . . . . . 100 lbs	28.60	-
Ammoniac sal. white (see Ammonium chloride coml.).		
Ammonium biborate, gran., dms., c.l. works . . . . . lb.	.90	-
Ammonium biborate powder 15c. per lb. higher.		
Ammonium bicarbonate, 300-lb. fib. dms., c.l., works. . . . 100 lbs.	28.00	-
bgs., c.l. . . . . 100 lbs.	25.00	-
Ammonium bichromate, photo-litho grade, gran. 100-lb. dms., l.t.l. works. . . . . lb.	2.00	-
Ammonium bifluoride, bgs., t.l., works. . . . . lb.	.70	-
Ammonium bromide, dom. NF, gran., dms., c.l., t.l., f.o.b. works . lb.	1.31	-
Ammonium chloride, white, tech., fine gran., bgs., c.l., works. . . . . 100 lbs.	18.00	-
USP, gran., dms. . . . . lb.	.40	.53
Ammonium citrate, dibasic, 250-lb. dms. f.o.b. works. . . . . lb.	2.79	-
Ammonium dimolybdate, approx. 85%, 24,000 lbs. or more . lb.	5.48	-
Ammonium fluoborate, tech., dms., c.l., t.l., works, frt. equald. . lb.	1.79	-
Ammonium heptamolybdate, cryst., dms., 24,000 lbs. f.o.b. works. . . . . lb.	5.57	-
Ammonium lauryl sulfate, tanks, f.o.b. works. . . . . lb.	.29	.32
Ammonium lignin, sulfonate, bulk, f.o.b. Hoquiam, Ore. . . . . ton	72.00	-
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bulk, S.E. divd. . . . . ton	130.00	135.00
Ammonium oxalate, tech., fine, gran. 300-lb. dms., t.l., f.o.b. works. . . . . lb.	1.42	1.66
Ammonium pentaborate gran. bgs., c.l., works. . . . . lb.	.75	-
Ammonium pentaborate powder 20c. per lb. higher.		
Ammonium persulfate, 225-lb. dms, 24,000 lbs. or more, f.o.b. works. . . . . lb.	.58	-
55-lb. bgs., same basis . . . . . lb.	.56½	-
Ammonium phosphate (see Di- and monoammonium phosphates).		
Ammonium silicofluoride, dms. c.l., t.l., works. . . . . lb.	.30¾	-
Ammonium sulfate, lg. gran., bulk, c.l., works. . . . . ton	80.00	90.00
std., coml., bulk, f.o.b. works . . ton	60.00	70.00
tech., bgs., c.l., t.l., works . . . . . ton	108.00	120.00
Ammonium sulfide, liq., 40-44% tanks, 100% basis, frt. equald. . ton.	460.00	-
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).		
Ammonium thiocyanate, tech., cryst., bgs., c.l., works . . . . . lb.	1.02	-
tech soln., 50%, tanks, frt. equald. . . . . lb.	.93	-
Ammonium thiosulfate, photographic, 60%, tanks, f.o.b. works . . lb.	.13	-
Ammonium zirconyl carbonate, soln., bulk. . . . . lb.	.72	-
Amyl acetate, primary mixed isomers, tanks, divd. . . . . lb.	.57	-
Amyl alcohol, primary mixed isomers, tanks, frt. alld. . . . . lb.	.46½	-
Amylcinnamic aldehyde, dms. . . . . lb.	2.35	2.50
p-tert-Amylphenol, bulk, works . . . lb.	.91	1.03
Amyris oil, dms. . . . . lb.	11.50	12.25
Anethole, tech., dms. . . . . kilo	10.20	-
USP, dms. . . . . lb.	3.65	4.60
Angelica root oil, bots. . . . . kilo	700.00	-
Aniline, tanks, f.o.b. . . . . lb.	.33	.35½
Anise oil, dms. . . . . kilo	11.75	-
Anise seed, Egypt, bgs. . . . . lb.	.88	1.00
Spanish, bgs. . . . . lb.	1.08	1.10
Turkish, bgs. . . . . lb.	.98	1.00
Anisic aldehyde, cns, dms . . . . . lb.	4.80	6.40
o-Anisidine, imp., dms., divd. . . . . lb.	2.27	-
p-Anisidine, imp., cast solid, dms., works. . . . . lb.	1.90	-
flakes, same basis . . . . . lb.	2.25	-
Anthranilic acid, purif., 99% min., dms., t.l., frt. alld. . . . . lb.	1.70	-
Antimony fluoborate, liq. conc., 175-lb. dms., t.l., works. . . . . lb.	3.02	-
Antimony metal. bulk, c.l., mines. . . lb.	1.35	1.39
Antimony oxide, high-tint. bgs., c.l., frt. alld. E. of Rockies . . . . . lb.	1.35	1.50
Antimony trichloride, anhyd., solid, dms., t.l. works. . . . . lb.	3.60	-
Apomorphine hydrochloride, NF, bots., ... gm.	15.00	-
Apricot kernel oil, dms. . . . . lb.	2.05	-
Arabic gum, powd., bbls. . . . . lb.	1.85	2.15
spray dried. . . . . lb.	2.00	2.50
USP grade . . . . . lb.	6.75	9.25
Aromatic petroleum solvents (see Solvent. naphtha, petroleum, aromatic).		
Arsenic, crude (see Arsenious trioxide).		
Arylid, red (see Napthol, arylid red).		
Arsenious trioxide, 99%, bulk, c.l., f.o.b. warehouse. . . . . lb.	.42	.45
Asbestine (see Talc, fibrous).		
Ascorbic acid, USP, 100 kilos, divd. . . . . kilo.	9.00	10.50
Ash, black (see Barium sulfide).		
Asphalt gilsonite, (see Gilsonite).		
Asphalt petroleum cutback, tanks, E. Coast. . . . . gal.	.86	-
emulsion, tanks, tankwagons, E. Coast. . . . . gal.	.68	-
steam-refined, 40-300 penetration, tanks, tankwagon. . . . . ton	170.00	-
steep roofing grade, bulk tankwagon. . . . . ton	175.00	-
Aspirin, USP, cryst., powd., 250-lb.dms., c.l., f.o.b. . . . . lb.	1.95	-
10% starch granulation, white, 250-lb. dm, c.l., f.o.b. . . . . lb.	1.97	-
16% starch granulation. white, same basis . . . . . lb.	2.80	-
Freight equald. shipt. identical quantity over standard route from N.Y., Phila., Midland, Mich., Chicago and St. Louis.		
Atropine sulfate, USP, bots. . . . . oz.	10.00	11.00
Avocado oil, dms. . . . . lb.	4.00	4.50
Azelaic acid, tech., 50-lb. bgs., t.l. c.l., divd. . . . . lb.	1.23	-
Azo orange, bbls., divd. . . . . lb.	4.60	-
Azo yellow, 10 G, bgs., divd. E. of Rockies . . . . . lb.	4.40	-
AzoG yellow pigment, bgs., same basis . . . . . lb.	2.45	-

B

Bacitracin, USP, non-sterile, one billion units or more . . . million units	6.30	6.60
Barbital, NF, 50-kilo dms., divd. . . kilo	22.50	-
Barbital-sodium, NF, 50-kilo dms. divd. . . . . kilo	23.00	-
Barite, dry-grd., Southern, off-color, coarse, bgs., c.l., f.o.b. mines lb.	.09	.11
water-grd., white, bgs., c.l., f.o.b. works . . . . . lb.	.13	-
unbleached, extra-fine, pigment grade, c.l., f.o.b. works . . ton	160.00	-
Barium carbonate, precip., bulk, c.l., works, frt. equald. . . . . lb.	.25	-
bgs., same basis. . . . . lb.	.25½	-
photo grade, bgs., same basis ton	510.00	-
Barium chlorate, 100-lb. dms., 1-10 dm. lots, works. . . . . lb.	1.04	-
Barium chloride, tech., cryst., bgs., c.l., works. . . . . ton	470.00	-
anhyd. drums c.l., same basis. ton	590.00	-
Barium chloride, purif., cryst. 400-lb. dms., works. . . . . lb.	3.76	-
Barium monohydrate, 55-lb. bgs., c.l., t.l. f.o.b. works . . . . . 100 lbs.	46.00	-
octahydrate, cryst., bgs., same basis. . . . . 100 lbs.	33.00	-
Barium nitrate, 100-lb. bgs., t.l., works. . . . . 100 lbs.	32.50	-
Barium oxide, grd., dms., c.l., divd. . . . . 100 lbs.	31.25	-
tote bins, same basis. . . 100 lbs.	30.00	-
Barium peroxide, 700-lb. dms., c.l., t.l., works. . . . . lb.	.30	-
Barium stearate, bulk, t.l., f.o.b. dest. . . . . lb.	1.05	-
Barium sulfate, tech. (see Barite and Blanc fixe).		
Barium sulfate, USP, X-ray diagnosis grade, powd., 25 kilo bgs., 10,000 kilo lots . . . . . lb.	.58½	-
Barium sulfide (black ash), dms., c.l., works. . . . . ton	460.00	-
Basil Egyptian . . . . . lb.	.69	.92
French . . . . . lb.	.88	.90
Basil oil, Comores . . . . . lb.	90.00	-
Basil oil, Grand Vert. . . . . lb.	45.00	-
Battery acid, t.l., f.o.b., works . . . ton	52.00	70.75
Bauxite, calcined, refractory grade, 87½-88% Al_2O_3, Baltimore & Mobile. . . . . metric-ton	229.28	-
Bay oil, NF, 55-60%, dms. . . . . lb.	10.50	15.00
Bayberry wax, bgs. . . . . lb.	2.70	3.00
Beeswax, refd., bleached white, bricks, 100-lb. ctns. . . . . lb.	3.10	3.20
white, slabs, 100-lb. ctns. . . . . lb.	3.05	3.10
yellow, bricks, 100-lb. ctns. . . . lb.	3.00	3.10
yellow, slabs, 100-lb. ctns. . . . lb.	2.95	3.05
Bentonite, dom., c.l. bags, f.o.b. works . . . . . ton	43.50	-
Benzaldehyde, NF, dms., ... lb.	1.25	-
tech., dms., c.l., t.l., ... lb.	.73	.83
Prices are 4c. per lb. higher West of the Rockies.		
Benzene, indust. or nitration, barges, f.o.b.		
Baton Rouge, La. . . . . gal.	.85	-
Baytown, Tex. . . . . gal.	.85	-
Beaumont, Tex. . . . . gal.	.85	-
Catlettsburg, Ky. . . . . gal.	.85	-
Chicago district . . . . . gal.	.85	-
Chocolate Bayou, Tex. . . . . gal.	.85	-
Clairton, Pa. . . . . gal.	.85	-
Corpus Christi, Tex. . . . . gal.	.85	-
Deer Park, Tex. . . . . gal.	.85	-
Houston district, spot . . . . . gal.	.81	.82
Lima, Ohio . . . . . gal.	.85	-
Wood River, Ill. . . . . gal.	.86	-
Benzene hexachloride, 99% gamma isomer (see Lindane).		
Benzidine orange, powd., bgs., divd. lb.	4.90	8.70
liq., containers, divd. . . . . lb.	3.36	3.89
Benzidine yellow, AAA, bgs., divd. . lb.	5.80	6.05
AAOA, bgs., divd. . . . . lb.	7.35	7.40
AAOT, bgs., divd. . . . . lb.	5.95	6.20
Benzocaine, USP, dms., 1,000 kg. lots, f.o.b. works . . . . . kg.	10.00	11.50
Benzodihydropyrone, dms. . . . . lb.	12.50	-
Benzoic acid, tech., bgs., c.l., t.l., f.o.b. works. . . . . lb.	.55	.58
USP cryst., dms., ton lots same basis . . . . . lb.	1.73	1.75
Benzoin gum, Sumatra, cs. . . . . lb.	1.80	-
Benzophenone, N.F., 1,000 lbs. or more, f.o.b. . . . . lb.	3.50	3.60
N.F., 1,000 kilos or more, f.o.b. . . . kg.	7.45	-
tech, 1,000 kilos or more, fob works. . . . . kgs.	4.35	-
2,2-Benzothiazyl disulfide (see Mercaptobenzothiazyl disulfide).		
Benzotriazole, flake, dms., 1,000 lbs. or more, f.o.b. works . . . . . lb.	6.10	-
powd., dms., 1,000 lbs. or more, same basis. . . . . lb.	6.20	-
photo-grade, dms., 1,000 lbs. or more, same basis. . . . . lb.	9.90	-
Benzotrichloride, refd., dms. t.l., frt. equald. . . . . lb.	.87	-
tanks, frt. equald . . . . . lb.	.80	-
Benzoyl chloride dms., c.l., works. . lb.	.57	.59
tanks, frt. equald. . . . . lb.	.74½	.75
Benzoyl peroxide, regular gran., 10,000-lb. lots or more, bgs., works, frt. equald. . . . . lb.	2.35	6.98
paste, 50% and 55% formulations, dms., pails, frt. equald. . . . lb.	1.71	1.95
Benzyl acetate, dms. . . . . lb.	1.20	2.80
Benzyl alcohol, N.F. t.l. dms. frt. equald. . . . . lb.	1.26	1.85
tanks, same basis . . . . . lb.	1.37	1.43
photo grade, t.l., dms., same basis . . . . . lb.	1.40	-
tanks, same basis . . . . . lb.	1.34	-
tech. grade, t.l., dms., same basis lb.	1.32	-
tanks, same basis. . . . . lb.	1.26	-
Benzyl benzoate, dms. . . . . lb.	1.65	2.25
Benzyl chloride, tech., non-ret. dms., c.l., t.l., frt. equald. . . . . lb.	.59	-
tanks, f.o.b. . . . . lb.	.54	-
Benzyl cinnamate, 25-lb. cns. . . . lb.	8.50	9.95
n-Benzyl-N,N-dimethylamine, t.l., dms., f.o.b. works . . . . . lb.	2.30	-
Benzyl formate, dms. . . . . lb.	10.60	-
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).		
Benzyl isoeugenol, dms. . . . . lb.	15.60	-
Benzyl propionate, dms. . . . . lb.	3.35	-
Benzyl salicylate . . . . . lb.	2.90	3.25
Benzylidine acetone, cns., bots. . . . lb.	2.95	3.25
Bergamot oil, nat., Italian, f.o.b. . . kilo	44.00	-
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).		
Biotin, cryst., 500 gms. or more . . . gm.	6.50	-
Biphenyl (see Diphenyl).		
Bismuth nitrate, purif. cryst., 100-lb. dms., frt. equald. . . . . lb.	10.00	-
Bismuth oxychloride, 100-lb. dms., works. . . . . lb.	17.20	-
Bismuth subcarbonate, USP, medium powd., 225-lb. dms., works. lb.	15.31	15.50
Bismuth subgallate, purif., 100-lb. dms., works. . . . . lb.	10.60	-
Bismuth subnitrate NF, powd., 200-lb. dms., works. . . . . lb.	14.45	-
Bismuth subsalicylate, purif. powd., 50-100 lb. dms., works. . . . lb.	17.00	-
Bismuth trioxide, reagent. powd., 100-lb. dms., works. . . . . lb.	15.00	15.45
Bisphenol-A, epoxy grade, hopper cars, divd. . . . . lb.	.67	-
polycarbonate grade, same basis lb.	.71	-
Blanc fixe, syn., imp., bags . . . . . lb.	.20	-
Bois de rose oil, Braz., dms. . . . . lb.	10.75	12.00
Peruvian, dms. . . . . lb.	10.75	-
BON toner (red 48) dms., frt. alld. . . lb.	7.25	8.05
(red 52) dms., same basis. . . . . lb.	6.50	7.90
Bonemeal, steamed, dom., bgs., c.l., f.o.b. Midwest plants. . . . . ton	180.00	190.00
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).		
Bone phosphate, precip. (see Calcium phosphate tribasic).		
Borax, tech. anhyd. 98%, bgs., c.l., works . . . . . ton	647.00	-
bulk, c.l., works . . . . . ton	602.00	-
Borax, tech., gran., decahydrate, 99½% bgs., c.l., works . . ton	237.00	-
bulk, c.l., works. . . . . ton	192.00	-
tech., pentahydrate, gran. 99½%, bgs., c.l., works. . . . . ton	265.00	-
bulk, c.l., works . . . . . ton	220.00	-
Borax, NF (See Sodium borate).		
Boric acid, tech., gran., 99.9%, bgs., c.l., works. . . . . ton	614.00	-
bulk, c.l., works . . . . . ton	569.00	-
Boron trichloride, CP, 1,600-lb. cyls., works. . . . . lb.	3.60	-
Boron trifluoride, 60-lb. cyls., t.l., f.o.b. works. . . . . lb.	4.03	-
bulk, same basis . . . . . lb.	3.47	-
Boron trifluoride, etherate, 500-lb. dms., t.l., f.o.b., works. . . . lb.	2.35	-
phenolate, 500-lb. dms., t.l., same basis . . . . . lb.	1.65	-
Bromine, dms., t.l., works . . . . . lb.	.67	-
bulk, 45,000-lb. min., works . . . . lb.	.33	.34½
purif., t.l., divd . . . . . lb.	.75	-
Bromine divd., prices for dms. and bulk shipped W. of Rockies, 1c.-per-lb. higher. Bulk t.l. prices 1c. to 2½c.-per-lb. higher for 30,000-lb. min. and 4c. to 5½c.-per-lb. higher for 15,000-lb. min.		
Bromochloromethane, dms., c.l., f.o.b. Midland . . . . . lb.	1.12	-
Butadiene, tanks, f.o.b. . . . . lb.	.12½	.13
1,4-Butanediol, tanks, f.o.b., frt. equald. . . . . lb.	.80	-
dms., same basis. . . . . lb.	.88	-
Butene-1, tanks, f.o.b. works. . . . . lb.	.26	.28
n-Butyl acetate, syn., tanks, frt. alld. lb.	.52½	-
n-Butyl acrylate, tanks, frt. alld. E. . lb.	.69	-
n-Butyl alcohol, syn., ferment, tanks, frt. alld. . . . . lb.	.34	-
sec-Butyl alcohol, syn., tanks, divd. lb.	.365	-
tert-Butyl alcohol, syn., tanks, divd. E. . . . . lb.	.70	-
Butyl aldehyde (see Butyraldehyde)		
Butyl benzyl phthalate, tanks, frt. alld. . . . . lb.	.69	-
Butyl chloride, tanks, works. . . . . lb.	.99	1.00
Butyl cyclohexyl phthalate, tanks, divd. . . . . lb.	.74	-
n-Butyl ether, dms., c.l. t.l., works. . lb.	1.85	-
Butyl isodecyl phthalate, tanks, divd. . . . . lb.	.35	-
n-Butyl lactate, tanks, f.o.b. works . lb.	1.58	-
n-Butyllithium, 15% soln., 1,000-lb. lots or more, cyls., 100% basis, divd. . . . . lb	15.45	-
tanks, 3,000-lb. min., 100% basis, divd. . . . . lb.	14.75	-
Butyl methacrylate, tanks, frt. equald. . . . . lb.	.88	-
Butyl octyl phthalate, tanks, divd. E. . . . . lb.	.40	.42
Butyl oleate, dist., dms., c.l. . . . . lb.	.70	.82
tanks. . . . . lb.	.60	.75
p-tert-Butylphenol, tanks works . . . lb.	.70	-
Butyl phthalate (see Dibutyl phthalate).		
Butyl stearate cosmetic, dms . 77 dms. or more. . . . . lb.	.91	.97
tanks. . . . . lb.	.92	-
Butyl stearate tech., t.l . . . . . lb.	.80	.62
tanks . . . . . lb.	.55	.58
Butylamine (see Mono-, Di- and Tributylamine).		
tert-Butylamine, dms., c.l., t.l., f.o.b. works. . . . . lb.	1.31	-
tanks, same basis. . . . . lb.	1.17	-
Butylated hydroxyanisole, food grade, dms., divd . . . . . lb.	8.80	8.85
Butylated hydroxytoluene, food, feed grades, c.l., t.l., bgs., divd. . lb.	1.24	1.30
tech., bgs., c.l., t.l., divd. . . . . lb.	1.24	1.30
1,3-Butylene glycol, tanks, divd. . . lb.	.72	-
Butyraldehyde, tanks, divd. . . . . lb.	.29½	.38
Butyric acid, tanks, frt. alld. . . . . lb.	.44½	-
Butyric ether (see Ethyl butyrate).		
Butyrolactone, tanks, f.o.b. plant. . . lb.	1.20	-
n-Butyronitrile, dms., c.l., divd. . . . . lb.	.93	-
tanks, divd. . . . . lb.	.54	-

C

Cadmium chloride, purif. cryst., 100-lb. dms., t.l., works. . . . . lb.	3.73	-
Cadmium, CP, red, dark shade, bbls., 100-lb. lots, frt. alld., E. of Rockies . . . . . lb.	11.33	16.35
light shade, bbls., same basis . . . lb.	9.16	12.05
medium shade, bbls., same basis. lb.	10.69	15.20
medium-light shade, bbls., same basis. . . . . lb.	10.26	14.50
Cadmium, CP yellow, all shades, bbls., 100-lb. lots, frt. alld., E. of Rockies. . . . . lb.	6.10	7.07
Cadmium fluoborate, liq. conc., dms., t.l., works, frt. equald. . . . . lb.	2.27	-
medium-light shade, bbls., same basis. . . . . lb.	3.22	-
Cadmium-mercury lithopone, maroon shade, bbls., frt. alld. E. of Rockies. . . . . lb.	4.60	-
Cadmium metal ingots or sticks, ton lots, cs., divd. . . . . lb.	1.20	1.50
Cadmium nitrate, purif., flake 400-lb. dms., c.l., t.l., f.o.b. ship. pt. lb.	2.10	-
Cadmium-selenide-lithopone, orange, light shade, bbls., 400-lb. lots. frt. alld. E. of Rockies. . . . . lb.	3.97	4.00
deep shade, bbls., same basis. . lb.	4.47	4.50
Cadmium-selenide lithopone, red, dark shade, bbls., same basis. . lb.	6.77	6.80
light shade, bbls., same basis. . . lb.	5.27	5.30
medium light shade, bbls., same basis. . . . . lb.	5.72	5.75
medium shade, bbls., same basis. lb.	6.37	6.40
maroon shade, bbls., same basis. lb.	7.47	-
Cadmium-selenide lithopone, yellow, all shades, bbls., same basis. . lb.	2.97	3.00
Cadmium sulfate, 50-lb. dms., any quantity, f.o.b. ship. pt. . . . . lb.	4.05	-
Caffeine, dom., USP, syn. cryst. anhyd., powd., 100-lb. dms., c.l., t.l., frt. alld. . . . . lb.	4.60	-
imp., cryst., anhyd., powd., dms., 10,000 lbs. or more. . . . . lb.	4.70	4.85
Calamine, USP, dms. . . . . lb.	1.50	1.70
Calamus oil, dms. . . . . lb.	26.80	38.00
Calciferol, (see Ergocalciferol).		
Calcium acetate, purif., powd., dms., t.l., works. . . . . lb.	.87	-
Calcium carbide, std., generator size, bulk, c.l., f.o.b., works,. . . ton	402.00	-
Calcium carbonate, pulverized, 325-mesh, bgs., bulk, f.o.b. works. . . . . ton	46.00	-
slurries, 64% solids, same basis . . . . . ton	97.00	100.00
72% solids, same basis . . . ton	109.27	-
quicklime, gran., ind., bulk, works. . . . . ton	100.93	-
Calcium carbonate, coated, bgs., c.l., works. . . . . lb.	.0830	.1600
Calcium carbonate, precip., bgs., cl., t.l. . . . . ton	385.00	445.00
Calcium carbonate precip. medium, bgs., c.l., works. . . . . ton	110.00	150.00
precip. dense, bgs., c.l., surface treated, bgs., c.l., works. . ton	265.00	-
ultrafine, USP, bgs., c.l., works . . . . . ton	217.00	225.00
Calcium chloride, conc., reg. grade. 77-80%, flake, bulk, c.l., works. . . . . ton	153.00	-
100-lb. bgs., c.l., same basis . . . . . ton	196.00	-
anhyd., 94-97%, flake or pellet, bulk, c.l., same basis. . . . . ton	217.00	-
80-lb. bgs., c.l., same basis. . . ton	279.00	-
brining grade, 80-lb. bags . . . . . ton	285.00	-
Calcium chloride, liq., 100 percent basis, t.c., t.t., barge . . . . . ton	99.75	-
45% same basis . . . . . ton	116.00	-
Calcium chloride, USP, gran., 225-lb. dms., t.l., frt. equald. . . . . lb.	.90	-
Calcium citrate, purif., 200-lb. dms., 10,000 lbs. or more, f.o.b. works. . . . . lb.	3.82	-
Calcium cyanamide, indust., anhyd. dms., works. . . . . ton	400.00	450.00
Calcium gluconate, USP powd. t.l. . lb.	1.80	-
Calcium hydride, lump, dms., 25-1,000-lb. lots works. . . . . lb.	10.50	13.25
Calcium hypochlorite, 100-lb. dms., truckloads ship't. E. of Rockies. . . . . 100 lbs.	92.40	-
Calcium hypophosphite, dms., bulk, 500 kilos or more. . . . . kilo	13.75	14.50
Calcium iodate, FCC dms., f.o.b. works. . . . . lb	5.50	-
Calcium iodide, 50-kilo dms., f.o.b. works. . . . . kilo	23.65	25.65
Calcium lactate, NF, powd., pentahydrate, dms., 24,000 lbs. or more, f.o.b. works . . . . . lb.	2.00	-
NF, gran., trihydrate, same basis. lb.	2.10	-
special gran., dried grade, same basis . . . . . lb.	2.80	-
Calcium naphthenate, liq., 4% Ca., c.l., f.o.b. plant, E. of Rockies. . lb.	.85	-
d-Calcium pantothenate, USP, 100-500-kilo lots. . . . . kilo	11.50	12.50
dl-Calcium pantothenate, feed grade, f.o.b. frt. alld., 250 kilos or more . . . . . kilo	8.00	8.50
dl-Calcium pantothenate, calcium chloride complex, feed grade, 160 grams per lb., f.o.b., frt. alld., 500 lbs or more . . . . . lb.	2.75	-
Calcium phosphate, dibasic, feed grade, 18½% P. bulk, c.l., t.l., f.o.b. works . . . . . ton	228.00	-
Calcium phosphate, dibasic, dihydrate, USP, bgs., c.l., t.l., works, frt. equald. . . . . 100 lbs.	62.50	-
anhyd., USP, same basis. . 100 lbs.	71.75	-
dentifrice grade, same basis. . 80 lbs.	49.80	-
Calcium phosphate, monobasic, monohydrate, food grade, bgs., c.l., t.l., works, frt. equald. . . . . 100 lbs.	50.50	-
anhyd., food grade, same basis. . . . . 100 lbs.	54.95	-
tribasic, NF precip., bgs., c.l., frt. equald. . . . . 100 lbs.	62.50	-
Calcium propionate, dms., 2,000 lbs. or more f.o.b. frt. alld. . . . . lb.	.50	.55
Calcium silicate, hydrated, bgs., c.l., works. . . . . lb.	.07	-
Calcium silicate, paint grade (see Wollastonite).		
Calomel, NF, mild powd., 100-lb. dms., f.o.b. works. . . . . lb.	8.50	-
Camphene chlorinated, 67-69% (see Toxaphene).		
Camphor, monobromated, dms., kgs. . . . . lb.	3.63	3.70
Camphor, syn., tech., 165-lb. dms., 5,000 lbs. or more . . . . . lb.	1.80	-
USP, powd., 165-lb. dms., 5,000 lb. lots or more. . . . . lb.	2.36	-
syn., refd., 1-oz. tablets, ctns. 1,000-lb. lots or more. . . . . lb.	3.60	-
Camphor oil, yellow, 25-lb, dms . . . lb.	2.50	-
white, dms. . . . . lb.	1.50	-
spec. grav., 1.070, dms. . . . . lb.	2.00	2.25
Cananga oil, Indonesian, dms. . . . . kilo	17.00	-
Candelilla wax, crude, bgs. . . . . lb.	1.90	-
refd. pure, bgs. . . . . lb.	2.10	-
Capric acid, coml, pure, dms. . . . . lb.	.60	.65
tanks . . . . . lb.	.60	.65
Capric aldehyde (aldehyde C-10) dms., cns. . . . . lb.	3.95	5.35
Caprolactam monomer, flake, bgs., t.l., f.o.b. shipping point. . . . . lb.	.67	-
molten, tanks, same basis. . . . . lb.	.65	-
Capryl alcohol sec. 92-99% tanks, f.o.b. works. . . . . lb.	.35	-
Caprylic acid, coml. pure tanks. . . . lb.	.73½	-
Capsicum (see Pepper, red).		
Capsicum oil (see Capsicum oleoresin).		
Capsicum oleoresin, NF, from dom. pepper, dms. . . . . lb.	11.00	-
NF, from African pepper, dms. 500,000 pungency. . . . . lb.	9.00	-
1,000,000 pungency . . . . . lb.	17.00	18.00
Caraway oil, Poland, dms. . . . . lb.	22.00	25.00
Caraway seed, Dutch, bgs. . . . . lb.	.58	.59
Egyptian, bgs. . . . . lb.	.50	.53
Carbon black, furnace, fast extruding (FEF), bulk, c.l., works. . . . . lb.	.2125	-
bgs., c.l., works. . . . . lb.	.2425	-
general purpose (GPF), bulk, c.l., works. . . . . lb.	.2075	-
bgs., c.l. works . . . . . lb.	.2375	-
high abrasion (HAF), high structure, bulk, c.l. works. . . . . lb.	.2600	-
bgs., c.l., works . . . . . lb.	.2800	-

CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

Carbon Black, low structure, bulk, c.l. works. . . . . lb.	.240	.260
bags, c.l. works . . . . . lb.	.270	.290
Intermediate-super-abrasion (ISAF). . . . . lb.	.25	-
bgs., c.l. works. . . . . lb.	.28	-
super-abrasion (SAF), bulk, c.l., works. . . . . lb.	.31	-
bgs., c.l., works. . . . . lb.	.4050	-
semi-reinforcing (SRF), bulk, c.l., works. . . . . lb.	.210	-
bgs., c.l., works. . . . . lb.	.240	-
Carbon black, thermal, medium, bgs. c.l., works. . . . . lb.	.30	.30½
bulk, c.l. works. . . . . lb.	.32	.34½
Carbon black oil, barge, f.o.b. Gulf refineries. . . . . bbls.	10.50	12.50
f.o.b. W. coast refineries . . . . . bbls.	10.50	12.50
Carbon disulfide, t.c., f.o.b. works ton	420.00	-
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. . . . . lb.	.36	-
tech., dms., c.l., t.l., frt. alld. . . . . lb.	.31	-
tank transport (min. 4,000 gals.) frt. alld. . . . . lb.	.24	-
Carboxymethyl cellulose (see CMC).		
Cardamom oil, NF, bots. . . . . lb.	65.00	-
Cardamoms, decort, Guatemalan. . lb.	3.00	-
green, Guatemalan, bgs. . . . . lb.	6.25	9.75
Carmine, No. 40, NF, bulk, 100-lb. lots or more, divd. . . . . lb.	135.00	140.00
Carnauba wax, Parnahyba, No. 1, yellow, bgs., ton lots. . . . . lb.	1.95	2.05
Ceara, No. 1, yellow, bgs., ton lots. . . . . lb.	1.75	1.90
North Country, No. 2, refined, bgs., ton lots . . . . . lb.	1.55	1.65
Carnauba wax, North Country No. 3, centrifuged, bgs., ton lots . lb	1.10	-
North Country, No. 3, refined, bgs., ton lots. . . . . lb.	1.30	1.45
Powdered carnauba wax, 20 to 100 mesh, 20c. per lb. higher.		
b-Carotene, in vegetable oil, semi-solid suspension, 400,000 A units per gram, 33 lbs. or more. . lb.	32.75	-
b-Carotene, liq. in vegetable oil, 500,000 A units per gram., 33 lbs. or more. . . . . lb	40.75	-
b-Carotene, dry, beads, 10%, 167,000 A units per gram 50-lb. cns lb.	26.85	-
d-Carvone, 25-lb. dms., syn. . . . . lb.	48.00	-
l-Carvone. . . . . lb.	7.00	7.25
Cascara sagrada bark, bulk. . . . . lb.	1.00	-
Casein, imp., acid-precip., grd., 30-mesh, Australian, edible, same basis. c.i.f. . . . . lb.	1.45	-
Australian, indust., same basis c.i.f. . . . . lb.	1.385	-
Cassella acid, 303 mol. wt., dms., frt. alld., 100% basis. . . . . lb.	3.70	-
Cassia, Korintji "A" bgs. . . . . lb.	.95	1.05
"B" bgs. . . . . lb.	.72	.78
Castor oil, raw, No. 1, Braz. tanks. . lb.	.31	.31½
USP 5-9 dms. . . . . lb.	.74	-
refd. deod., 5-9 dms. . . . . lb.	.78	-
blown, 5-9 dms. . . . . lb.	.75	-
dehydrated, bodied, tanks. . . . . lb.	.74	-
dehydrated, unbodied, tanks. . . . lb.	.65	-
Castor oil, acids dehydrated, dms. . lb.	1.10	-
ricinoleic acid. . . . . lb.	.79½	.83
Castor pomace, bgs., container load, f.o.b., Miami, Fla. . . . . ton	154.00	-
Castoreum, nat., cns. . . . . lb.	18.00	35.00
syn., cns. . . . . lb.	11.00	-
Catechol, CP, 45-kilo dms., 50-239 dms., f.o.b. . . . . kilo.	7.93	-
tech., bgs., t.l., same basis. . . . kilo.	3.71	-
Caustic potash (see Potash, caustic).		
Caustic soda (see Soda, caustic).		
Cedarleaf oil, dms. . . . . lb.	17.50	-
Cedarwood oil, Texas, dms., cns. . . lb.	3.50	4.00
Virginia. . . . . lb.	3.70	4.20
Cedrol, prime dms. . . . . lb.	5.25	-
Cedryl acetate, dist., dms. . . . . lb.	4.25	5.30
Celery seed, Indian, bgs. . . . . lb.	.48	-
Celery seed oil . . . . . lb.	50.00	53.00
Cellulose acetate, powd., bgs., t.l., divd. E. . . . . lb.	1.30	-
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., t.l., divd. E. . . . . lb.	1.75	-
38% butyryl content, bgs., divd. E. . lb.	1.59	-
50% butyryl content, bgs., divd. E. . lb.	1.61	-
55% butyryl content, bgs., divd. E. . lb.	1.63	-
Cellulose gum, pure, high vis., bgs., 24,000-lb. lots or more works, f.o.b. Hopewell, Va. . . . . lb.	1.60	1.70
std., low or medium vis., bgs., c.l., t.l., f.o.b. Hopewell, Va. . . . lb.	1.60	1.90
Cerium concentrate CeO_2, 50 lbs. . . lb.	1.35	-
Cerium hydroxide 90% CeO_2, dms., works. . . . . lb.	5.40	-
77% CeO_2, dms., works. . . . . lb.	4.20	1.60
Cerium oxide, optical grade, bgs., 50-lb. lots or more, divd. . . . . lb.	1.85	1.90
Cetyl alcohol, NF, cns., c.l., t.l., divd. E. lb.	.68½	1.27
Chalk (see Calcium carbonate).		
Chamomile flowers, Hungarian, cs.. lb.	4.25	4.50
Roman, cs. . . . . lb.	4.94	-
Egyptian, whole . . . . . lb.	2.70	3.00
Chamomile oil, blue, Egyptian . . . . . lb.	545.00	-
blue, Hungarian . . . . . lb.	370.90	-
Chenopodium oil, NF, cns. . . . . lb.	15.00	-
Chicago acid, dry, bbls., frt. alld. . . . lb.	13.50	-
Chilies (see Pepper, red).		
Chlorendic anhydride, tech., dms., t.l., works. . . . . lb.	1.30	-
Chlorinated paraffin, 40% chlorine, bulk, divd., Zone 1 . . . . . lb.	.45	.46½
50% chlorine, same basis . . . . . lb.	.46	.47½
60% chlorine, same basis . . . . . lb.	.48½	.49½
70% chlorine, resinous, 50-lb. bgs., c.l., divd., Zone 1. . . . . lb.	.69	-

ABBREVIATIONS

THE TERMINOLOGY OF THE CHEMICAL MARKETPLACE

a/alpha
alld./allowed
amorph./amorphous
AMP/American melting point
anhyd./anhydrous
AOAC/Association of Official Agricultural Chemists
a.p.a./available phosphoric acid
approx./approximately
artif./artificial
ASTM/American Society for Testing & Materials

b/beta
Be/Baume
bbls./barrels
b.g./beta-gamma
bgs./bags
bls./bales
bots./bottles
b.p./boiling point
b.p.l./bone phosphate of lime
b.r./boiling range
bxs./boxes

C./Centigrade
cbys./carboys
c.c./cubic centimeters
CD/completely denatured
c.i.f./cost insurance freight
c.l./carload
cns./cans
coml./commercial
conc./concentrated
cp/chemically pure
cps./centipoises
cryst./crystalline
cs./cases
ctns./cartons
cyls./cylinders

d-/dextro
dbl./double
denat./denatured
dest.-dist./destructively distilled
dl/dextro-laevo
dist./distilled
distr./distributor
divd./delivered
dms./drums
dom./domestic

E/East
e.p./end point
equald./equalized
exp./expressed
extr./extracted

F./Fahrenheit
f.a.s./free alongside
ferment./fermentation
f.f.a./free fatty acid
f.f.c./free from chlorine
f.f.p.a./free from prussic acid
fib./fiber
f.o.b./free on board
f.p./freezing point
frt./freight

g-/gamma
gal./gallon
g.p./general purpose
gran./granular
grd./ground

i.b.p/initial boiling point
imp./imported

incl./included
indust./industrial

kgs./kegs

l-/laevo
lb./pound
l.c.l../less carload
l.t.l./less truckload
liq./liquid

m-/meta
m.a.p./mixed aniline point
mcg./microgram
mfrs./manufacturers
min./minimum
molt./molten
m.p./melting point

N/nitrogen
n-/normal
nat./natural
neut./neutral
NF/National Formulary
No./number
Nom./nominal

o-/ortho
ord./ordinary
oz./ounce

P/phosphorus
p-/para
Pac./Pacific
pf./proof
phos./phosphate
photo/photographic
pkgs./packages
powd./powdered
precip./precipitated
prod./producer
pt./point
pulv./pulverized
purif./purified

redist./redistilled
refd./refined
refy./refinery
resub./resublimed
ret./returnable

SD/specially denatured
s.d./single distilled
SE/Southeast
sec./secondary
secs./seconds
sp.g./specific gravity
ship't/shipment
soln./solution
std./standard
syn./synthetic

tanks/railroad tankcars
tech./technical
tert./tertiary
t.l./truckload
ton/refers to short ton of 2,000 pounds
TVA/temporary voluntary allowance
t.w./tankwagons

USP/United States Pharmacopeia

vis./viscosity
VM&P/varnish makers & painters

W/West
whse./warehouse
w.w./water-white

NOTE: A unit-ton is 1 percent of 2,000 pounds of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the unit-ton price shown in Chemical Marketing Reporter gives the price of 2,000 pounds of the material.

CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

Chlorinated paraffin, Zone 2 prices are 1c. per lb. higher and Zone 3 prices are 2c per lb. higher and t.l. drum prices are 5c per lb. higher

Chlorinated rubber, 5, 10, 20 cps., bgs., t.l., dlvd. ... lb.	1.86	-
40 cps, bgs., t.l., dlvd. ... lb.	1.92	-
125 cps., bgs., t.l., dlvd. ... lb.	2.60	-
300 cps., bgs., t.l., dlvd. ... lb.	2.75	-
Chlorine, tanks single units works, f.o.b., frt. equald. ... ton	195.00	200.00
Chloroacetic acid, mono, high purity, flake, 99% bulk f.o.b. works ... lb.	.58	-
2-Chloro-4-aminotoluene, tech., flq., dms., c.l., t.l., f.o.b. works ... lb.	1.88	-
o-Chloroaniline, liquid, dms., c.l., f.o.b. works ... lb.	1.63	-
tanks, same basis ... lb.	1.55	-
p-Chloroaniline, solid, c.l., t.l., f.o.b. lb.	1.70	-
flake, dms., c.l., same basis ... lb.	2.00	-
o-Chlorobenzaldehyde, dms., t.l., works ... lb.	2.45	-
p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works ... lb.	3.84	3.85
o-Chlorobenzoic acid, dms. l.t.l. wks. ... lb.	3.90	-
p-Chlorobenzoic acid, dms., 500-lb. lots or more, works ... lb.	1.69	2.25
Chloroform, tech. tanks, distr. dlvd. ... lb.	.34½	-
tech., consumers, tanks, dlvd. ... lb.	.34½	-
NF tanks, min., consumer, 4,000 gals. dlvd. ... lb.	.35½	-
2-Chloro-4-nitroaniline, paste, commodity basis, dms., t.l., f.o.b. ... lb.	3.06	-
powd., same basis ... lb.	3.15	-
4-Chloro-2-nitroaniline, paste, 172.5 mol. wt., commodity basis, dms., t.l., f.o.b. ... lb.	2.25	-
powd., same basis ... lb.	2.70	-
o-Chlorophenol, dms., c.l., frt. equald. ... lb.	2.00	2.40
p-Chlorophenol, dms., c.l., frt. equald. ... lb.	1.25	1.70
Chloropicrin, coml., 1,500-lb. cyls., t.l., f.o.b. works ... lb.	1.25	-
Chlorosulfonic acid, tanks, frt. equald. ... lb.	.18½	-
p-Chlorotoluene, tech., tanks, works ... lb.	1.00	-
Cholecalciferol, dry, 40,000,000 units per gram, kilo lots ... gm.	24.00	-
Choline bitartrate, cryst., 98% min., 50 kilo dms., f.o.b. Springfield, Mo. ... kilo	6.90	-
Choline chloride, feed grade, 70% aqueous, t.c., t.t., dlvd. E of Rockies ... lb.	.28	-
60% dry supplement ... lb.	.39	-
Choline chloride, 60% dry supplement, bulk hopper cars ... lb.	.39	-
bgs., 50,000 lbs. min. ... lb.	.40	-
Choline chloride, pharmaceutical, 50 kilo, lots, f.o.b. Springfield, Mo. ... kilo	5.00	-
Choline dihydrogen citrate, 98% min., 50 kilo lots, f.o.b. Springfield, Mo. ... kilo	6.00	-
Chrome green, CP extra light, bgs., dlvd. E. of Rockies ... lb.	1.68	-
light, bgs., same basis ... lb.	1.70	-
medium, bgs., same basis ... lb.	1.72	-
extra deep, CP., same basis ... lb.	1.74	-
Chrome orange, CP, bgs., dlvd. E. of Rockies ... lb.	.83	.89
Chrome yellow CP bbls., dlvd. E. of Rockies ... lb.	1.09	1.18
Chromic acid, 99¾%, flake dms., c.l., frt. equald. ... lb.	1.18	-
grd., same basis ... lb.	1.25	-
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works ... lb.	.10	-
Chromium fluoride, dms., t.l., works ... lb.	.81	-
Chromium nitrate, dms., t.l., f.o.b. ... lb.	1.45	-
10% metal soln., 500-lb. dms. same basis ... lb.	.74	.88
Chromium oxide, hydrated, 50-lb. bgs., c.l. ... lb.	5.50	-
pure, bgs., c.l. ... lb.	1.90	2.00
Cinnamic aldehyde, cns., dms. ... lb.	1.85	2.45
Cinnamic alcohol, 25-lb. cns. ... lb.	4.50	-
Cinnamon, H2 ... lb.	1.05	1.10
Cinnamon bark oil, bots. ... lb.	88.00	95.00
Cinnamon leaf oil, dms. ... lb.	2.70	-
Citral, nat., dms. ... lb.	5.50	6.65
syn., 55-gal. dms. f.o.b. ... lb.	3.18	-
Citric acid, USP, hydrous, gran., 250-lb. dms., t.l. ... lb.	1.19	-
Citric acid, USP, anhyd., gran. 250-lb. dms., t.l., del. ... lb.	.86	-
Citric acid anhyde, powder bc. higher		
Citronella oil, Ceylon, dms. ... lb.	2.12	2.24
Java, dms. ... kilo	5.05	-
China, dms. ... kilo	4.90	-
Citronellal, 25-lb cans ... lb.	3.85	7.40
Citronellol drums, f.o.b. ... lb.	3.68	-
Citronellyl acetate, dms. ... lb.	5.50	6.50
Citronellyl formate, 25-lb. cns. ... lb.	6.85	-
Civet, artif., bots. ... lb.	20.00	-
nat. ... kilo	500.00	-
Clay ball, dom. air floated, bgs., c.l., Tenn. ... ton	49.00	-
dom., crushed, moisture-repellent, bulk, c.l., Tenn. ... ton	24.00	-
Clay China (see Kaolin).		
Cleaners, naphtha, 140° flash tanks, New Jersey or New York, dlvd. ... gal.	1.40	-
Clove leaf oil Indonesian, reg. dms. kilo	3.15	-
Madagascar, reg. ... kilo	3.90	-
Clove bud oil ... kilo	24.00	-
Cloves, Brazil ... lb.	2.35	2.40
Zanzibar ... lb.	4.20	-
Madagascar ... lb.	2.35	2.40

CMC, technical, 96% minimum, low or medium vis., bgs., 24,000 lbs., f.o.b. Hopewell, Va., 100% basis ... lb.	1.25	-
detergent makers, f.o.b. manufacturing point ... lb.	.64	-
CMC, purif., high vis., (see Cellulose gum).		
Coaltar pitch, indust., liq., works. ton.	250.00	255.00
roofing, 140-155, Federal specification RP-381 Type 1, bulk works ... ton	350.00	-
Cobalt acetate, dms., t.l., frt. alld. ... lb.	3.61	4.25
Cobalt carbonate, powd., dms., frt. alld. ... lb.	6.61	8.16
Cobalt chloride, dms., 5,000 lbs. or more, ft. equald. ... lb.	4.15	-
Cobalt hydrate, dms., t.l., frt. alld. ... lb.	8.20	10.55
Cobalt metal, 99.5-99.9%, 250-kilo. dms., f.o.b. NY, Chicago. lb.	11.70	-
Cobalt naphthenate, liq., 6% Co., dms., dlvd. ... lb.	2.08	-
Cobalt nitrate, dms., t.l., frt. alld. ... lb.	2.74	3.45
Cobalt oxide, imp., black, 72-73% Co. ... lb.	9.51	-
Cobalt oxide, imp., 70-71% Co. ... lb.	9.78	-
Cobalt phosphate powd. 32.1% Co., dms., dlvd. ... lb.	1.35	-
Cobalt resinate fused, 3% Co., dms. ... lb.	.38½	-
Cobalt sulfate, cryst., bgs., 10,000 lbs. or more, frt. alld. E. ... lb.	2.81	3.54
monohydrate, dms., frt. alld. ... lb.	4.58	6.02
Cobalt tallate, 6% Co., dms., dlvd. ... lb.	2.16	-
Cocillana bark, bls. ... lb.	.40	.45
Cocoa butter, spot ... lb.	2.20	-
Coconut oil (See Oils, Fats & Waxes market report).		
Coconut oil acids, distilled, t.c., f.o.b. ... lb.	.52	.58
double distilled, same basis ... lb.	.54	.63
Cod oil, f.o.b., Gloucester, Mass., bulk ... gal.	8.50	-
Codeine alkaloid, NF, 25-kilo lots ... kilo	900.00	-
Codeine phosphate, USP, cns., 25-kilo lots ... kilo	640.00	-
Codeine sulfate, NF cns., 25-kilo lots ... kilo	775.00	-
Codliver oil, NF, dms. ... gal.	6.50	7.25
Copaiba balsam, dms. ... lb.	1.50	-
Copaiba oil, cns., dms. ... lb.	3.75	-
Copper acetate, monohydrate, cryst., tech., dms., t.l., works ... lb.	.71	.74
Copper bromide, (cupric) 200-lb. dms., 100,000-lbs. -per-year contracts, works ... lb.	1.34	-
Copper carbonate, 55% Cu, dark, dense, 50-lb. bgs., c.l., t.l., works ... 100 lbs.	108.30	-
light, fluffy, 50 lb. bags, c.l., t.l., works ... 100 lbs.	109.30	-
Copper chloride (cupric), anhyd., c.l., works ... lb.	.90	-
Copper cyanide, tech. dms., 24,000-lb. lots or more ... lb.	2.30	2.62
Copper fluoborate, (cupric) liq. conc., dms., t.l., works, frt. equald. ... lb.	.82	-
Copper gluconate, FCC grade, 25-lb. dm., frt. equald. ... lb.	6.50	-
Copper metal electrolytic wire bars, dlvd., domestic, basis ... lb.	.62½	-
Copper naphthenate, liq., 8% Cu., dms., frt. alld. ... lb.	1.19	-
Copper nitrate (cupric), purif., flake, dms., t.l., works ... lb.	.43¾	-
Copper oleate, solid, 8% Cu. dms., works frt alld. ... lb.	.97	-
Copper oxide, black (cupric), dms., 80,000-lb. lots, works ... lb.	1.21	-
red (cuprous), dms., 97%, USN Type 1, (AA), 80,000-lb. lots, works ... lb.	1.19	1.20
red, 90%, Type 2, same basis ... lb.	1.15	-
Copper-8-quinolinolate, 10%, liq. emulsion, t.l., dlvd. ... lb.	2.52	-
Copper sulfate, cryst., pentahydrate, 99% bgs., c.l., f.o.b. works ... 100 lbs.	48.45	-
CP, pentahydrate, cryst., dms., t.c.l., works ... 100 lbs.	60.00	-
monohydrated, 35% Cu, dms., c.l., works ... 100 lbs.	75.10	-
basic, bgs., c.l., works ... 100 lbs.	88.30	-
Coriander oil, USP, dms. ... lb.	22.00	28.00
Coriander seed Moroccan ... lb.	.36	-
Rumanian ... lb.	.36	.37
Corn oil (See Oils, Fats & Waxes market report).		
Corn oil, crude, foots (soapstock), 95% acid; New York ... lb.	.13½	.14
Corn oil acid, dms. ... lb.	.50	-
tanks ... lb.	.32	.40
Corn syrup 43 Be., tanks, f.o.b. works ... 100 lbs.	11.22	11.43
Cortisone acetate, USP, dms., 5 kilos or more ... gram.	.80	-
Cottonseed meal (See Oils, Fats & Waxes market report.)		
Cottonseed oil (See Oils, Fats & Waxes market report.)		
Cottonseed oil, acidulated (soap stock), acid, 95%, tanks, N.Y. ... lb.	.13	-
Cottonseed oil acids, dist., dms. ... lb.	.63	-
tanks ... lb.	.55	-
Coumarin, NF X, cryst., over 600-lb. lots ... lb.	6.00	6.20
Cream of tartar (see Potassium bitartrate).		
Creosote, coaltar, grade 1, tanks, f.o.b. works ... gal.	1.16	1.18
soln., 80/20, tanks, same basis. gal.	1.134	1.17
p-Cresidine, fused, dms., works ... lb.	4.31	-
m-Cresol, 95-98%, dms., t.l., f.o.b. ... lb.	1.71	-
tanks, same basis ... lb.	1.65	-
m,p-Cresol, 99%, dms., t.l., f.o.b. ... lb.	.94	-
bulk, same basis ... lb.	.82	-
o-Cresol, 99% pure, dms., t.l., f.o.b. lb.	.87	-
bulk, same basis ... lb.	.75	-
98% pure, dms., t.l., f.o.b. ... lb.	.87	-
bulk, same basis ... lb.	.75	-
p-Cresol, 98%, dms., t.l., f.o.b. ... lb.	1.22	-
bulk, same basis ... lb.	.95	1.15
Cresylic acid, coaltar, dom., metapara content above 25%, resin and tricresyl phosphate grades, tanks, frt. alld. ... lb.	.58	-
Cresylic acid, dom., metapara content 25% or less, tanks, frt. alld. lb.	.58	-
Crotonic acid, 200-lb. dms., t.l., f.o.b. dlvd. ... lb.	1.50	-
Cryolite syn., bulk, c.l., works ... ton	510.00	550.00

Cube root, powd., 5% rotenone, basis, 50-lb. bgs., t.l., works ... lb.	.60	-
Cumene, bulk, contract, f.o.b. ... lb.	.14	.14
Cumin seed, Indian, bgs. ... lb.	.95	1.00
Cyanuric acid, dms., c.l., t.l. frt. equald. ... lb.	1.16	1.37
Cyclamen aldehyde, 50% min. aldehyde content, dms. ... lb.	4.85	-
96.5%, dms. ... lb.	7.35	9.20
90-92%, dms. ... lb.	7.85	-
Cyclohexane, bulk, barges, wks. gal.	.9825	.9925
Cyclohexanol tech., tanks, f.o.b. ... lb.	.52	.55½
Cyclohexanone tech., tanks, f.o.b. works ... lb.	.55½	.58½
tanks, dlvd. ... lb.	.565	-
Cyclohexylamine, tech., tanks, works ... lb.	.85	-

D

2,4-D acid, tech., 50-lb. bgs., c.l., t.l., works, frt. equald. ... lb.	1.10	1.25
2,4-D butyl ester, tech., 55-gal. dms., c.l., t.l., works, frt. equald. ... lb.	1.30	-
tanks, same basis ... lb.	1.25	-
2,4-D dimethylamine salt, t.c., t.t. works, frt. alld. ... gal.	8.05	-
Decyl alcohol, mixed isomers, tanks, dlvd. ... lb.	.32	-
perfume grade, dms. ... lb.	.75	-
Defluorinated phosphate (tricalcium), feed grade, 18% P, c.l., bulk, f.o.b. works ... ton	195.00	228.00
Denatured alcohol, ethyl, CD18, CD19, tanks, dlvd. E. ... gal.	1.87	-

NOTE: Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl,		
SD2B, tanks, dlvd. E. ... gal.	1.81	-
SD3A, tanks, dlvd. E. ... gal.	1.76½	-
SD23A, tanks, dlvd. E. ... gal.	1.86	-
SD23H, tanks, dlvd. E. ... gal.	1.89	-
SD29, tanks, dlvd. E. ... gal.	1.83	-
SD30, tanks, dlvd. E. ... gal.	1.72½	-
SD35A, tanks, dlvd. E. ... gal.	1.88½	-
Denatured alcohol, ethyl, brucine formula SD40, tanks, dlvd. E. ... gal.	1.83	-
ethyl, optional formula, SD40, tanks, dlvd. E. ... gal.	1.82½	-

For anhyd. alcohol on above formulae, prices are 12c. per gal. higher.

West Coast dlvd. prices are the same as Eastern prices, except in Idaho, Oregon and Washington where a 5c. differential on tankcars is maintained.

Desoxyephedrine hydrochloride (See Methamphetamine hydrochloride)		
Detergent alkylate, straight chain dodecylbenzene, tanks, barges, f.o.b. ... lb.	.45	-
Dextrin, corn, canary dark, paper bgs., c.l., works ... 100 lbs.	28.04	-
white, paper bgs., c.l., works ... 100 lbs.	27.43	-
Dextrose, anhyd., coml., bgs., c.l., dlvd. New York ... 100 lbs.	41.10	-
USP special, 100-lb. bgs., c.l., dlvd. New York ... 100 lbs.	46.50	-
Dextrose, hydrated coml. bgs., c.l., dlvd. New York ... 100 lbs.	24.25	-
Western zone ... 100 lbs.	25.60	-
Diacetone alcohol, acetone free, tanks, dlvd. ... lb.	.52	-
Diacetyl, flavor grade, dms. ... lb.	9.25	15.00
Diammonium phosphate, fert. grade. min. 18% N, 46% P. bulk, c.l., f.o.b. Fla. works ... ton	140.00	145.00
Diammonium phosphate, feed grade, 18% N, 20% P, bulk c.l., f.o.b. Fla. works ... ton	240.00	-
bgs., same basis ... ton	250.00	-
Diammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald. ... 100 lbs.	52.50	-
food grade, bgs., c.l., t.l., same basis ... 100 lbs.	57.75	-
2,4-Di-tert-amylphenol, min. 95.5%, dms., c.l., t.l., works ... lb.	1.04	-
tanks, works ... lb.	.97	-
Diarylide yellow, OT, (yellow 14), dms., frt. alld. ... lb.	6.20	-
o-Dianisidine dihydrochloride, 100%, MW 244, dms., t.l., dlvd. ... lb.	4.26	-
2,6-Di-tert-Butyl-p-Cresol (see Butylated hydroxytoluene)		
Dibutyl fumarate, tanks, f.o.b. works ... lb.	.77	.85
Dibutyl maleate tanks, f.o.b. works. lb.	.63	.64
Dibutyl phthalate, tanks, works ... lb.	.54	.60
Dibutyl sebacate tanks, works ... lb.	1.72	1.89
Dibutylamine, dms., c.l., dlvd. ... lb.	1.12	-
tanks, same basis ... lb.	1.06	-
2-5-Dichloroaniline, flake, dms., works ... lb.	2.00	-
fused, dms., works ... lb.	1.80	-
3,4-Dichloroaniline, tech. 98%, solid, dms., c.l., t.l., f.o.b. works ... lb.	1.46	1.57
o-Dichlorobenzene, tech., 80%, dms., c.l., t.l. dlvd. ... lb.	.52	-
tanks, same basis ... lb.	.45	-
98% reld., dms., c.l., same basis ... lb.	.54	-
tanks, same basis ... lb.	.47	-
p-Dichlorobenzene, graded, 300-lb. dms., t.l., f.o.b., frt. equald. lb.	.51	.52
tanks, liq., same basis ... lb.	.43	.47
2,6-Dichloro-4-nitroaniline, dms., 10,000 lbs. or more, works. lb.	3.30	-
Dichlorophenoxyacetic acid (see 2,4-D).		
Dicyclohexylamine, dms., c.l., t.l., f.o.b. ... lb.	1.35	-
tanks, same basis ... lb.	1.25	-
Dicyclohexyl phthalate, bgs., c.l., t.l., dlvd. ... lb.	1.25	-
Dicyclopentadiene, high-purity, 97-98%, tanks, works ... lb.	.35	-
Diethanolamine, tanks, frt. alld. ... lb.	.44	.47
Diethanolamine lauryl sulfate, tanks, frt. alld. ... lb.	.41	-
DDVP (see Dimethyl dichlorovinyl phosphate).		

Diethyl barbituric acid (see Barbital)		
Diethyl carbonate, tankwagons, f.o.b. works ... lb.	1.40	-
Diethyl ethanolamine, CP dms, c.l., dlvd. ... lb.	1.18	-
tanks, dlvd ... lb.	1.10	-
Diethyl ethanolamine tech., 8c. per lb. lower.		
Diethyl oxalate, dms, c.l., f.o.b. works ... lb.	1.80	-
Diethyl phthalate, tanks, f.o.b. ... lb.	.69	.88
odorless cosmetic grades, t.l., works ... lb.	.97½	-
Diethyl sulfate, tanks, frt. alld. E. ... lb.	.59	-
Diethyl thiourea, dms., c.l, t.l., works ... lb.	2.48	-
Di-2-ethylhexyl adipate (see Dioctyl adipate).		
Diethyl toluamide 95-97% min. meta isomer. dms., t.l., f.o.b. works ... lb.	2.75	-
N,N-Diethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. ... lb.	3.18	-
tanks, same basis ... lb.	3.10	-
Diethylamine, dms., c.l., dlvd. ... lb.	1.15	-
tanks, same basis ... lb.	1.02	-
N,N-Diethylaniline, dms., c.l., t.l., f.o.b. works ... lb.	1.83	-
tanks same basis ... lb.	1.75	-
Diethylbenzene, tanks, f.o.b works lb.	.98	-
Di-2-ethylhexyl azelate (see Dioctyl azelate).		
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).		
Diethylene glycol, tanks, dlvd. E. ... lb.	.29½	.31½
Diethylene glycol monobutyl ether, dms., c.l., frt. alld. E. ... lb.	.65	-
tanks, frt. alld. E. ... lb.	.57	-
Diethylene glycol monoethyl ether, dms., c.l., frt. alld. E. ... lb.	.64	-
tanks, frt. alld. E. ... lb.	.56	-
Diethylene glycol monomethyl ether, dms., c.l., frt. alld. ... lb.	.62	-
tanks, frt. alld. ... lb.	.54	-
Diethylene glycol monobutyl ether acetate, dms., c.l., dlvd. E. ... lb.	.80	-
tanks, dlvd. E. ... lb.	.72	-
Diethylene glycol monoethyl ether acetate, dms, c.l., frt. alld. E. lb.	.80	-
tanks, frt. alld. ... lb.	.72	-
Diethylenetriamine, tanks, f.o.b. works ... lb.	1.60	1.61
Diethylenetriamine pentaacetic acid, pentasodium salt solution, tank-cars/tanktrucks, frt. equalized ... lb	.45	-
Digitoxin, USP, imp., bots. ... gram	2.60	3.00
Diglycol laurate, dms, ton lots ... lb	.32½	-
Diglycol stearate, dms, t.l ... lb	.62	.73
Dihydrazine sulfate, dms., works ... lb	1.10	1.25
Dihydrostreptomycin sulfate, bulk kilo.	46.00	-
Dihydroxyacetone, 50-kilo lots, works ... kilo.	40.00	-
Di-isobutyl ketone, tanks, dlvd. ... lb	.60	-
Di-isobutyl phthalate tanks, dlvd. E. lb.	.55	.57
Di-isobutylene, tanks, f.o.b. Houston ... lb.	.37	-
Di-isodecyl phthalate, tanks, dlvd. ... lb.	.40	.40½
Di-isononyl phthalate, tanks, dlvd. ... lb.	.40	-
Di-iso-octyl azelate, tanks, dlvd. E. ... lb.	.99	1.07
Di-iso-octyl phthalate, tanks, dlvd. ... lb.	.40	-
Di-isopropanolamine, dms., c.l., frt. alld. ... lb.	.65½	-
tanks, same basis ... lb.	.58½	-
Di-isopropylamine, dms., c.l. dlvd. ... lb.	1.17	-
tanks, same basis ... lb.	1.07	-
Dilauryl 3,3-thiodipropionate, dms., t.l., frt. alld. ... lb.	1.89	-
Dill oil, USP, dms. ... lb.	7.00	8.25
Dimethyl anthranilate, dms. ... lb.	15.80	-
Dimethyl benzyl carbinyl acetate, 25-lb. dms. ... lb.	6.95	-
Dimethyl carbonate, dms, t.l., f.o.b. works ... lb.	.90	-
Dimethyl dichlorovinyl phosphate, 55-gal. dms., f.o.b. ... lb.	1.80	1.90
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E. ... lb.	1.15	1.18
tanks, dlvd. E. ... lb.	1.07	1.10
Dimethyl ether, aerosol grade, tanks, dlvd ... lb.	.38	-
Dimethyl phthalate, tanks, f.o.b works ... lb.	.65	-
Dimethyl sebacate, tanks, f.o.b works ... lb.	2.48	2.69
Dimethyl sulfate, ref. dms., c.l., f.o.b. works ... lb.	.57	-
tanks ... lb.	.48	-
Dimethyl sulfide, tanks, works ... lb.	.59	-
Dimethyl sulfoxide, tanks, works ... lb.	.78	-
Dimethylacetamide, bulk f.o.b. ... lb.	.87½	-
Dimethylamine, 25% soln., tanks, frt. equald., 100% basis ... lb.	.63½	-
40% soln., tanks, frt. equald., 100% basis ... lb.	.63½	-
anhyd., tanks, frt. equald. ... lb.	.54½	-
N,N-Dimethylaniline, t.l., f.o.b. ... lb.	1.03	-
t.l. dms. ... lb.	1.11	-
N,N-Dimethylformamide, dms., c.l., t.l., f.o.b., works ... lb.	.57	-
tanks, same basis ... lb.	.49	-
2,4-Dinitroaniline, tons-lots, f.o.b. ... lb.	1.22	-
Dinitroaniline, orange toner, CP, bgs., dlvd. E. of Rockies ... lb.	5.20	-
2,4-Dinitrochlorobenzene, crystalizing at 47°, t.l., f.o.b. Charlotte, N.C. ... lb.	.96	-
2,4-Dinitrophenol, 250-lb. dms., f.o.b. Charlotte, N.C. ... lb.	1.95	-
Dinitrotoluene, mix., tech. f.o.b. works ... lb.	.30	-
2,4-Dinitrotoluene, dms., c.l., t.l., works ... lb.	1.25	-
tanks, works ... lb.	1.20	-
Dioctyl adipate, tanks, frt. alld. E. ... lb.	.61	-
Dioctyl azelate, tanks, dlvd. E. ... lb.	.99	-
Dioctyl phthalate, tanks, dlvd. ... lb.	.40	-
Dioctyl sebacate, 99%, tanks, f.o.b. works ... lb.	1.47	-
1,4-Dioxane, tanks, frt. alld. E. ... lb.	1.18	-
t.l., same basis ... lb.	1.21	-
Dipentaerythritol, bgs., c.l., t.l., dlvd. E. ... lb.	1.42	-
Dipentene steam-dist., tanks, f.o.b. Fla. works ... lb.	.25	-
sulfate turpentine derived, tanks ... lb.	.28	-
Dip oil (see Tar acid oil).		
Diphenhydramine hydrochloride, USP, dom., 1,000-kilo lots, dms., dlvd. ... kilo.	20.00	-
Diphenyl, 99.9%, bgs., c.l., t.l., works ... lb.	[illegible]	-
tanks, works ... lb.	[illegible]	-

Diphenyl oxide, tech. grade, tanks. lb.	1.11	1.20
Diphenylamine, refd., flake, bgs., t.l., works, frt. equald. ... lb.	1.25	-
molten, tanks, works ... lb.	1.00	-
octylated, flake, bgs., t.l. f.o.b. works ... lb.	7.68	-
Diphenylguanidine, bgs., t.l., frt. alld. ... lb.	2.52	-
Diphenylhydantoin-sodium USP, dms. ... lb.	5.00	5.60
Diphenylmethane 4,4-di-isocyanate, polymeric, bulk, c.l., min. frt. alld. ... lb.	.91	-
Dipropylene glycol, tanks, frt. alld. ... lb.	.45	-
Dipropylene glycol monomethyl ether, dms., c.l., dlvd. ... lb.	.54	-
tanks, same basis ... lb.	.46	-
Di-o-tolylguanidine, powd., dms., t.l., frt. alld. ... lb.	2.92	-
Di-o-tolylthiourea, tech., solid, dms., t.l., frt. alld. ... lb.	3.11	-
Ditridecyl phthalate, tanks, dlvd. ... lb.	.64	.65
Diundecyl phthalate, tanks, dlvd. ... lb.	.61	.65
Divinylbenzene, 100% basis, tanks works ... lb.	2.75	2.60
dms, 100% basis ... lb.	3.00	2.70
l-Dodecanol, syn., tanks, f.o.b. ... lb.	.76½	-
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. ... lb.	.88	-
Dodecylbenzene (see Detergent Alkylate).		
Dodecylphenol, tanks, min. frt. alld. E ... lb.	.48	.53
Dyes, coaltar, certified colors for food, drugs and cosmetics, 100 lb. and over. frt. prepaid or alld.		
Blue, FD&C, No. 1 ... lb.	21.20	22.60
No. 2 ... lb.	29.15	29.22
Green, FD&C, No. 3 ... lb.	49.50	65.00
Red, FD&C, No. 3 ... lb.	24.00	24.50
Yellow, FD&C, No. 5 ... lb.	7.45	7.85
No. 6 ... lb.	6.45	6.75
Dyes, coaltar, certified colors for drugs and cosmetics. 100-lb. lots dlvd.		
Green, D&C, No. 5 ... lb.	38.50	-
No. 6 ... lb.	42.80	-
Red, D&C, No. 4 ... lb.	18.85	-
No. 17 ... lb.	38.90	-
No. 19 ... lb.	38.25	-
No. 22 ... lb.	12.45	-
No. 28 ... lb.	59.95	-
No. 33 ... lb.	48.95	-
Yellow, D&C, No. 7 ... lb.	21.00	-
No. 8 ... lb.	20.55	-
No. 10 ... lb.	48.80	48.85
No. 11 ... lb.	35.25	-
Dyes, coaltar, for general use in cloth and paper dyeing (by Color Index Name). f.o.b. works		
A Blk 1 Blue black ex. conc. ... lb.	5.75	-
Dyes, A Bl 9 Blue 2G ... lb.	5.46	-
A Bl 45 Alizarine Blu SAP 150% ... lb.	19.85	-
A Bl 90 Alizarine Br. Cy G ... lb.	14.13	-
A Bl 113 Navy 5R ... lb.	6.55	-
A Gr 16 Gast 2G 333% ... lb.	22.12	-
A Or 7 11 ... lb.	3.72	-
A Or 8 RO Ex. Conc. ... lb.	4.00	-
A Or 10 Wool Or G ... lb.	4.30	-
A Or 74 Metallized Or GNA ... lb.	6.15	-
A R 2G ... lb.	5.13	-
A R 14 Azo Rubine 133% ... lb.	8.85	-
A R 18 Scarlet 4R Conc. ... lb.	5.45	-
A R 88 Fast Red A. Conc. ... lb.	6.85	-
A R 151 Silk Red 3B Conc. ... lb.	4.50	-
A V 17 5BNS Conc. ... lb.	9.76	-
AV 49 4BNS Conc. ... lb.	12.22	-
A Y 17 Fast Light Yell 2G ... lb.	5.69	-
A Y 23 Tartrazine Ex Conc. ... lb.	6.18	-
B Bl 9 Zinc Free ... lb.	16.40	-
B Br 4 Bismark Brown R Ex. Conc. lb.	4.42	-
B G 1 Jade Crystals ... lb.	9.55	-
B Gr 4 Malachite Green Crystal. ... lb.	8.90	-
B V 1 Methyl Violet Crystals ... lb.	8.80	-
B V 10 Rhodamine B Ex. ... lb.	10.95	-
B Y 2 Bond Yell SFA 150% ... lb.	10.10	-
D Bl 1 Sky Blue 6B Conc. ... lb.	4.62	-
Ex. Conc. 300% ... lb.	9.25	-
D Bl 8 Azurine G Conc. ... lb.	9.45	-
D Blk 22 Fast Black GR ... lb.	2.85	-
Fast Black GR 150% ... lb.	4.28	-
D Br 230 Resin Fast Brown BRNB 200% ... lb.	7.23	-
D Gr 26 Resin Fast Green GL ... lb.	9.15	-
D R 2 4B Ex. Conc. ... lb.	7.98	-
D R 31 Brilliant-Red 12B Conc. ... lb.	6.16	-
D R 80 Fast Red 8BLN ... lb.	6.15	-
D R 81 Paper Red 8BLP ... lb.	6.85	-
D R 251 Fast Scarlet AV ... lb.	6.25	-
D Or 102 Fast Orange WSP Liq. ... lb.	2.47	-
WS. Conc. 150% ... lb.	11.25	-
D Y 4 Brilliant Paper Yell 3GX 125% ... lb.	4.69	-
Brilliant Paper Yell 3GX Liq. ... lb.	1.75	-
D Y 11 Stilbene Yellow GA. Ex. Conc. ... lb.	3.03	-
D Y 41 Fast Yellow RGL Conc. 200% ... lb.	9.75	-
D Y 27 Resin Fast Yellow L5G ... lb.	14.40	-
Dis R 1 Scarlet BA ... lb.	4.28	-
Dis R 91 Pink REL 200% ... lb.	21.00	-
Dis Y 3 Yellow G ... lb.	3.65	-
Dis Y 54 Yellow 3G ... lb.	6.84	-
Dis Or 3 Orange GRA ... lb.	4.91	-
Dis Or 37 Orange OB ... lb.	3.77	-
Dis V 1 4RN Paste ... lb.	7.85	-
Dis V 26 Bordeaux BV 200% ... lb.	17.25	-
Dis B1 27 Blue BGLF ... lb.	10.05	-
Dis B1 102 Blue GFDA 300% ... lb.	22.60	-
50% Paste ... lb.	4.10	-
V G 1 Jade Green Double Paste ... lb.	5.50	-
V Blk 25 Olive TA Paste ... lb.	5.85	-

E

Endrin, tech., 95-99%, dms., t.l. ... lb.	7.00	-
Ephedrine, syn. anhyd., USP, 80-oz. lots ... oz.	1.25	-
Ephedrine hydrochloride, NF, cryst., less than 1,000 kg. ... kilo	38.28	40.25
Ephedrine sulfate, USP, cryst., dms., less than 1,000 kilos ... kilo	43.00	46.25
Epichlorohydrin, tanks, dlvd. ... lb.	.88	-
Epinephrine base, syn., USP, bots., 100-gram lots ... gram	.60	-
Epoxy resin, liquid, bulk tanks, dlvd. ... lb.	1.31	1.41
Solid, bgs., t.l. ... lb.	1.28½	1.33½
Epsom salt (see Magnesium sulfate).		
Erythorbic acid, powd., gran., 100 lb. dms., t.l. or mixed t.l. f.o.b. works ... lb.	4.10	4.25
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N.C., Ohio, St. Louis, St. Paul, Va., W. Va. lb.	.75	-
Ester gum, wood-rosin type, dms., c.l., same basis ... lb.	.43	.46
Ethyl acetate, syn., 85-88%, tanks, dlvd. ... lb.	.41	.41½
99%, tanks, dlvd. ... lb.	.41½	.42½
Ethyl acetoacetate dms., c.l., dlvd. ... lb.	1.13	-
tanks, dlvd. ... lb.	1.05	-
Ethyl acrylate, tanks, frt alld. ... lb.	.66	-
Ethyl alcohol, syn., 190 pf., USP tax free, tanks, dlvd. E. ... gal.	1.55	-
Ethyl alcohol, absolute, 200 pf., tax free prices 12c. higher than 190 pf., tax free.		
Ethyl alcohol, fermentation, tanks, f.o.b. works ... gal.	1.06	1.28
Price range attributable to various state tax incentives.		
Ethyl alcohol, denat. (see Denatured alcohol, ethyl).		
Ethyl p-aminobenzoate, NF (see Benzocaine).		
Ethyl benzoate, dms. ... lb.	1.35	1.50
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E. ... lb.	.76	-
Ethyl butyrate, dms. ... lb.	1.35	1.50
Ethyl cellulose, standard vis., 7 cps. bgs., t.l., frt. equald. E. ... lb.	4.55	-
standard vis., 10, 20, 45, 100 cps., t.l., frt. equald. E. ... lb.	4.17	4.22
medium vis., 50, 70, 100 cps., t.l., frt. equald. E. ... lb.	4.26	-
USP vis., 7 cps bgs., t.l., frt. equald. E ... lb.	4.88	-
USP 10, 20, 45, 100 bgs., t.l., frt. equald. E ... lb.	4.69	4.69
VSP (medium) 50, 70, 100 bgs., t.l., Frt. equald. E. ... lb.	4.51	-
Ethyl chloride. tech., cyls., frt alld. ... lb.	.26	.28½
tanks, frt. alld. ... lb.	.24	.26½
Ethyl cinnamate, dms. ... kilo	41.00	-
Ethyl ethanolamines, mixed, dms., t.l., dlvd. E. ... lb.	1.23	-
tanks, dlvd. E. ... lb.	1.15	-
Ethyl ether, refined, tanks, f.o.b. ... lb.	.46	-
Ethyl hexanoate, dms. ... lb.	4.25	4.75
2-Ethylhexoic acid, dms., c.l., t.l., dlvd. E. ... lb.	.63	-
tanks dlvd. E. ... lb.	.57	-
2-Ethylhexyl acrylate, straight or mixed, tanks, frt. alld. E. ... lb.	.79.5	-
2-Ethylhexyl alcohol, tanks, dlvd. ... lb.	.35	-
Ethyl iodide, cbys., works ... lb.	6.25	-
Ethyl linalool, syn. 55-gal. dms. ... lb.	10.60	-
Ethyl linalyl acetate, syn., 55-gal dms. ... lb.	10.85	-
Ethyl methacrylate, tanks, frt. equald. ... lb.	1.06	-
n-Ethyl morpholine, dms., t.l., frt. alld. ... lb.	2.00-	-
tanks, same basis ... lb.	1.92	-
n-Ethyl-a-naphthylamine, dms., works ... lb.	1.04	-
Ethyl oxalate (see Diethyl oxalate).		
Ethyl parathion (see Parathion, ethyl).		
Ethyl silicate dist. (see Tetraethyl orthosilicate).		
Ethyl silicate, 40% available SiO_2, dms., t.l., f.o.b. works ... lb.	1.45	1.46
tanks, f.o.b. works ... lb.	1.39	-
N-Ethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. ... lb.	3.18	-
tanks, same basis ... lb.	3.10	-
N-Ethyl-o-toluidine, dms. ... lb.	2.85	2.90
Ethyl vanillin 100 lb. dms., 500 lbs. or more ... lb.	13.50	-
25 lb. dms., 500 lbs. or more ... lb.	13.75	-
100 lb. dms., less than 500 lbs. ... lb.	14.00	14.50
Ethylamine (see Mono-Di- and Tri-)		
N-Ethylaniline, dms., c.l., t.l., f.o.b. works ... lb.	1.66	-
tanks, same basis ... lb.	1.58	-
Ethylbenzene, bulk, f.o.b. Houston, Tex. ... lb.	.22	.23
Ethylene, contract, dlvd. ... lb.	.18	.18½
Ethylene brassylate, dms. ... lb.	16.00	18.25
Ethylenediamine, 99%, tanks, f.o.b. works ... lb.	1.30	1.305
Ethylenediamine dihydriodide ... lb.	7.55	9.25
Ethylenediamine tetraacetic acid, tetrasodium salt, soln., t.c., t. t., frt. equald. ... lb.	.36½	-
Ethylene dibromide dms., c.l., frt. equald. ... lb.	.38	.46
tanks, frt. equald. ... lb.	.32	.42
Ethylene dichloride, tanks, f.o.b. works ... lb.	.17	.17¼
Ethylene glycol, indust., tanks, frt. alld. ... lb.	.31	-
Ethylene glycol, monobutyl ether, tanks, dlvd. E. ... lb.	.41½	-
Ethylene glycol monoethyl ether, tanks, dlvd. E. ... lb.	.51	-
Ethylene glycol monomethyl ether, tanks, dlvd. E. ... lb.	.34	-
Ethylene glycol monobutyl ether acetate, tanks, frt. alld. E. ... lb.	.64½	-
Ethylene glycol monoethyl ether acetate, tanks, frt. alld., E. ... lb.	.55½	-
Ethylene glycol monomethyl ether acetate, tanks, frt. alld. E. ... lb.	.43	-
Ethylene oxide, tanks f.o.b. ... lb.	.35	.45
Ethylene trichloride (see Trichloroethylene).		
Eucalyptol, NF, dms. Portuguese. kilo.	7.50	-
Eucalyptus Citriadora Oil, Chinese kilo	3.05	-
Eugenol, USP, dms. ... kilo	7.65	-

F

Fennel oil, sweet, USP, cns. ... kilo	9.00	-
Fennel seed, Egypt ... lb.	.57	-
Indian ... lb.	.60	.62
Fenugreek seed, Indian, bgs. ... lb.	.28	.32
Ferric chloride anhyd., tech., 350-lb. dms., c.l., works ... 100 lbs.	86.00	-
Ferric chloride, 42 Be. photo grade dms., c.l., works ... 100 lbs.	9.10	-
Ferric chloride, sewage grade, 100 percent basis, f.o.b. works, tank works ... ton	176.00	255.00
Ferric nitrate, cryst., dms., t.l., f.o.b. lb.	.64	-
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works ... lb.	1.65	-
Ferric oxides (see Iron Oxides).		
Ferric phosphate, FCC g insoluble powder, dms, 10,000 lbs. ... lb.	1.10	1.15
Ferric pyrophosphate, soluble, purif., pearls, 50-lb. dm. ... lb.	1.11	-
Ferric resinate, precip., 6.75% Fe. dms., ton lots frt. alld. ... lb.	.45	-
Ferric sulfate, partly hydrated, 100-lb. bgs., c.l., works ... ton	141.00	-
bulk, works ... ton	117.00	-
Ferric ammonium citrate, NF, brown, green gran. 100 lb. dms., 2,000 lb. min., f.o.b. shipping pt. ... lb.	2.00	2.95
2c. per pound surcharge for shipments W. of Denver		
Ferric-ammonium oxalate, fine gran., 250-lb. dms., t.l., f.o.b. works. E. ... lb.	.42	-
Ferric hydroxyethylene diaminetriacetic acid, industrial grade, sodium salt, soln., 4.5% Fe, t.c., t. t., f.o.b. works ... lb.	.55	-
agricultural grade, sodium salt solution, 5% Fe, t.c., t. t., f.o.b. works ... lb.	.64	-
Ferrous fluoborate liq. conc., dms., t.l., works, frt. equald. ... lb.	.64	-
Ferrous gluconate, NF, t.l., works E. lb.	2.25	-
Ferrous naphthenate, liq., 6%, Fe. dms., dlvd. ... lb.	1.17	-
Ferrous sulfate, moist, bulk, t.l. f.o.b. works ... ton	30.00	-
heptahydrate, gran., bulk, t.l., f.o.b. works ... ton	145.00	150.00
monohydrate, gran., bulk., t.l. f.o.b. works ... ton	170.00	180.00
USP, powd., 400-lb. dms. ... lb.	.49	-
cryst. 250-lb dms ... lb.	.61	-
Fir oil, Canada dms. ... lb.	10.00	-
Siberia, dms. ... lb.	12.75	-
Fish oil, refd., alkali, tanks, c.l. ... lb.	.29	-
kettle-bodied, tanks ... lb.	.32	.36
light, cold-pressed, dms., c.l. ... lb.	.34	-
tanks ... lb.	.26	-
Fishmeal, dom., menhaden, 60% protein grd., bulk, f.o.b. Atlantic port ... ton	295.00	-
f.o.b. Gulf port ... ton	290.00	-
Imp., Chilean, 65% protein min., bulk, c.l. t.l., ex whse., f.o.b. Atlantic and Gulf ports ... ton	285.00	-
Fluoboric acid, dms., t.l., works, frt. equald. ... lb.	.70	-
Fluorocarbon, No. 11 bulk, tanks, delvd ... lb.	.57	.64
No. 12, bulk, same basis ... lb.	.68	.74
No. 22, bulk, same basis ... lb.	1.05	1.14
No. 113, bulk, same basis ... lb.	.89	.93½
No. 114, bulk, same basis ... lb.	1.02	1.08
Fluosilicic acid (see Hydrofluosilicic acid).		
Formaldehyde, 37% methanol free (uninhibited) dlvd., gulf ... lb.	.088	.0905
44-45% (1% methanol) tanks, dlvd. ... lb.	.1015	.1065
37% (inhibited 7% methanol, dlvd. ... lb.	.0945	.1025
37% (inhibited 11-15% methanol) tanks, dlvd. ... lb.	.1055	.1080
Formamide, tanks, f.o.b. ... lb.	.39	-
dms., same basis ... lb.	.44	-
Formic acid 90% tanks, f.o.b. works ... lb.	.36½	-
95% dms., c.l., works ... lb.	.51½	-
Fructose, cryst., 18,000 kilos or more, dms. ... lb.	.90	1.03
Fumaric acid, food grade, bgs. t.l., frt. equald. E. ... lb.	.75½	.77½
tech. grade, bgs., t.l., f.o.b. frt. equald. ... lb.		.82½
Furfural, tanks, f.o.b. Cedar Rapids, Iowa, and Belle Glade, Fla. lb.	.75	-
Furfuryl alcohol, tanks, f.o.b. Memphis, Tenn. and Omaha, Neb. ... lb.	.72	-

G

G salt, dms., frt. alld. 100% basis ... lb.	2.30	-
Gallic acid, 400-kilo lots ... kilo	23.05	-
Garlic oil, dms., Egyptian ... kilo	88.00	105.00
Gelatin, edible, 100 AOAC test, dms., t.l.l., dlvd. ... lb.	1.50	1.75
125 AOAC test, dms., t.l.l. ... lb.	1.75	1.85
150 AOAC test, dms., t.l.l. ... lb.	1.85	1.95
175 AOAC test, dms., t.l.l. ... lb.	1.95	2.05
200 AOAC test, dms., t.l.l. ... lb.	2.05	2.15
225 AOAC test, dms., t.l.l. ... lb.	2.10	2.25
250 AOAC test, dms., t.l.l. ... lb.	2.20	2.35
275 AOAC test, dms., t.l.l. ... lb.	2.30	2.45
300 AOAC test, dms., t.l.l. ... lb.	2.50	2.65
Gentian violet (see Methyl rosaniline chloride).		
Geraniol, syn., 90-92%, dms. ... lb.	5.25	-
nat., 80-92%, dms. ... lb.	3.50	-
syn. 95-98%, dms. ... lb.	5.75	-
Geranium oil, Moroccan ... lb.	48.00	-
Bourbon ... lb.	65.00	-
Chinese ... kilo	23.00	-
Egypt ... lb.	22.50	-
Turkish (see Palmarosa oil).		
Geranyl acetate, dms. ... lb.	5.44	8.00
nat., dms. ... lb.	10.95	-
Geranyl formate, syn., dms. ... lb.	6.60	-
nat., dms. ... lb.	15.95	-
Gilsonite, g.p., bulk, c.l., f.o.b. Bonanza, Utah ... ton	160.00	-
selects, same basis ... ton	180.00	-
Ginger, Cochin, bgs. ... lb.	.63	.65
Chinese sliced ... lb.	.55	.70
Ginger oil, Chinese ... kilo	39.00	46.00
Indian ... kilo	44.00	46.00
Ginger oleoresin, NF, bots. ... lb.	30.00	-
Glauber's salt (see Sodium sulfate).		
Gluconic acid tech. 50% dms., c.l., t.l. f.o.b. works ... lb.	.50	-
tanks, same basis ... lb.	.44	-

CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

Glue, bone, extracted, green, jellygrams, bgs., c.l. ... lb.	-	-
85 jellygrams, bgs., c.l., f.o.b. ... lb.	.66	-
115 jellygrams, bgs., c.l., f.o.b. ... lb.	.78	-
135 jellygrams, bgs., c.l., f.o.b. ... lb.	.77	-
164 jellygrams, bgs., c.l., f.o.b. ... lb.	.79	-
192 jellygrams, bgs., c.l., f.o.b. ... lb.	.87	-
220 jellygrams, bgs. c.l. f.o.b. ... lb.	.93	-
Glue, hide,		
108 jellygrams, bgs., t.l., f.o.b. ... lb.	.80	-
135 jellygrams, bgs., t.l., f.o.b. ... lb.	.85	-
164 jellygrams, bgs., t.l., f.o.b. ... lb.	.90	-
192 jellygrams, bgs., t.l., f.o.b. ... lb.	.95	-
222 jellygrams, bgs., t.l., f.o.b. ... lb.	1.00	-
251 jellygrams, bgs., t.l., f.o.b. ... lb.	1.05	-
283 jellygrams, bgs., t.l., f.o.b. ... lb.	1.10	-
315 jellygrams, bgs., t.l., f.o.b. ... lb.	1.15	-
347 jellygrams, bgs., t.l., f.o.b. ... lb.	1.20	-
379 jellygrams, bgs., t.l., f.o.b. ... lb.	1.25	-
411 jellygrams, bgs., t.l., f.o.b. ... lb.	1.30	-
444 jellygrams, bgs., t.l., f.o.b. ... lb.	1.35	-
477 jellygrams, bgs., t.l., f.o.b. ... lb.	1.40	-
Glutamic acid, 99½% dms., 100-lb. lots, frt. alld. ... kilo	8.65	-
Glycerine, nat., refd., USP, CP 99½% tanks, dlvd. ... lb.	.89½	-
USP, CP, nat. 96%, tanks, dlvd. ... lb.	.87¼	-
Syn. 96%, tanks dlvd ... lb.	.89¼	-
Syn. 99.5%, tanks dlvd ... lb.	.91	-
Glycine (see Aminoacetic acid).		
Glyceryl guaiacolate. 100-lb. fib. dms. f.o.b. ... kilo	14.50	-
Glycolic acid (see Hydroxyacetic acid)		
Glyoxal 40% soln., bulk, tanks, dlvd. ... lb	.44½	-
Grapefruit oil, Fla., dms. ... lb.	2.75	-
Calif., dms. ... lb	2.25	-
Israel ... lb.	2.25	-
Graphite, amorph, powd., bgs, dms., ex whse. ... lb.	.18	.40
cryst., 88-90%, powd., bgs., dms., ex whse ... lb	30	60
Graphite, cryst, 90-92%, powd., bgs., dms., ex whse. ... lb	.40	.75
95-96% powd., bgs., dms., ex whse. ... lb.	.60	.90
Graphite, amorph., cryst., 97% and up, powd., bgs., dms, ex whse. ... lb.	.80	1.20
Graphite, flake, No. 1, 90-95%, bgs., dms., ex whse. ... lb.	.65	.75
No. 2, 90-95%, bgs., dms., ex whse. ... lb.	.65	.75
Grease (See Oils, Fats & Waxes market report)		
Grease oil (See Lard oil).		
Guaiacol, tech., 500-lb dms., 24,000 lb. min., f.o.b. Wallingford, Conn. ... lb.	2.70	-
NOTE: Purified grades are 10c. higher		
Gualacwood oil, dms. ... lb.	2.50	-
Guar gum, edible, bgs., c.l., f.o.b. ship't. pt. ... lb.	.60	.75
Indust., bgs., high viscosity, c.l., same basis ... lb.	.50	.65

H

Heliotropin, dms. ... lb.	8.00	8.25
Hemlock oil (see Spruce oil).		
Henbane leaves, bls. ... lb.	.55	-
Heptane, indust., tanks, f.o.b. Beaumont, Tex. ... gal.	1.07	-
95%, tanks, f.o.b. Houston, Tex. ... gal.	1.18	-
Heptanoic acid, syn., tanks, f.o.b. ...	.85	-
l-Hexadecanol, syn., tanks, f.o.b. ... lb.	.43½	-
Hexahydrophthalic anhydride, tech. dms., t.l.l., f.o.b. works ... lb.	1.42	-
Hexamethylenetetramine, gran. bgs., c.l., t.l., works ... lb.	.55	-
gran. dms., c.l., t.l., works ... lb.	.59	-
pdr. bgs., c.l., t.l., works ... lb.	.60	-
powd. dms, c.l., t.l., works ... lb.	.63	-
Hexane, indust., tanks, works ... gal.	1.01	1.16
95%, tanks, f.o.b. Houston, Tex. ... gal.	1.12	-
l-Hexanol, syn., tanks, f.o.b. ... lb.	.50	-
Hexyl alcohol, mixed isomers, tanks ... lb.	.32	-
p-Hexyl methacrylate, dms., c.l., works ... lb.	.75½	-
Hexylene glycol, tanks, dlvd. ... lb.	.50	-
Hexylresorcinol, USP, dms., 25-lb. lots or more, frt. alld. ... lb.	30.00	-
Homatropine hydrobromide, USP, 10-100-oz. lots, bots. ... oz.	10.25	11.30
Homatropine methylbromide, USP, 10-250 oz. lots, bots. ... oz.	9.70	10.70
Horehound herb, bls. ... lb.	.25	.28
Hydrazine hydrate, 85%, t.l., frt. alld. ... lb.	1.64	-
55-gal. dms., t.l., frt. alld. ... lb.	1.61	-
Hydriodic acid, purif., 47%-57%, 2-cbys., f.o.b. works ... lb.	7.50	-
Hydroabietyl alcohol, tech., solid, dms., c.l., f.o.b. zone 1 ... lb.	.85	-
tanks, f.o.b. zone 1 ... lb.	.80	-
Hydrobromic acid, 48% dms., c.l., t.l., f.o.b. ... lb.	.38½	-
Hydrochloric acid, anhyd. (see Hydrogen chloride).		

CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

Hydrochloric acid, 20° Be, tanks, works, East .... ton	55.00	65.00
Midwest .... ton	60.00	70.00
Gulf Coast .... ton	57.00	-
West Coast .... ton	90.00	105.00
22° acid, same basis, East ..... ton	68.00	76.00
Midwest .... ton	66.00	70.00
Gulf Coast .... ton	63.50	-
West Coast .... ton	100.00	115.00
NOTE: Prices vary and are either freight collect freight equalized depending on producer and location.		
Hydrocortisone acetate, micronized, dms., 25 kilos or more . gram.	.70	-
Hydrocortisone, alcohol, micronized, dms., 25 kilos or more . gram.	.70	-
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)		
Hydrofluoric acid, aqueous, 70% tanks., f.o.b. frt. equald .... 100lbs.	43.00	-
Hydrofluosilicic acid, 15-gal. dms., t.l., works, 30% basis .... ton	-	-
tanks, 100% basis, works ..... ton	190.00	210.00
Hydrogen bromide, anhyd. cyls., extra, 30,000-lbs., f.o.b. works. .lb.	7.00	-
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works .... lb.	.65	-
600-lb. cyls., c.l., same basis. . lb.	.62	-
Hydrogen chloride, anhyd., tube trailers, seller's trailer, min. 100,000 lbs. a year ...... lb.	.37	-
tube trailers, buyer's trailer ..... lb.	.27	-
Hydrogen chloride anhyd., tanks, works .... ton	270.00	-
Hydrogen cyanide, lq., 99.5%, tanks, works .... lb.	.60	-
Hydrogen fluoride, anhyd., tank cars c.l., f.o.b., frt. equald. ..... lb.	.6875	-
Hydrogen peroxide, 35% tech., tanks, works, ft. equald .... lb.	.2325	-
50% tankcars, frt. equald. .... lb.	.3225	-
70%, tankcars frt. equald. .... lb.	.45	-
Hydrogen sulfide, liq., 99.25% min. seller's tanks, works ...... lb.	.12	.13
170 lb. cylinders .... lb.	2.27	-
Hydroquinone, photo grade, consumers. c.l., t.l., divd. .... lb.	2.54	-
tech., dms. c.l., divd. .... lb.	1.95	-
Hydroxyacetic acid, tech., 70%, tanks, Belle, W. Va. .... lb.	.49½	-
Hydroxylammonium sulfate, dms., t.l., f.o.b. .... lb.	.83	-
p-Hydroxybenzene sulfonic acid (see p-Phenolsulfonic acid).		
Hydroxybutyl methylcellulose (visc. 12,000 cps.) 50 lb. bags, tl., cl. 30,000 lb. min., divd., zone 1 .... lb.	2.10	-
Hydroxycitronellal dimethyl acetal, dms. .... lb.	16.55	-
p-Hydroxydiphenylamine, dms., t.l., f.o.b. works .... lb.	4.10	-
Hydroxycitronellal,		
natural, dms. .... lb.	9.40	-
pure, dms. .... lb.	13.60	-
extra grade, dms. .... lb.	14.80	-
syn., dms. .... lb.	9.50	-
Hydroxyethyl cellulose, t.l., divd. ... lb.	2.07	2.12
Hydroxyethyl methylcellulose (visc. 5,000 through 45,000 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.73	-
Hydroxypropyl methylcellulose, premium, U.S.P. (visc. 4,000 through 15,000) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.87	-
Hydroxypropyl methylcellulose, U.S.P (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.99	-
Hydroxypropyl methylcellulose (visc. 4,000 through 15,000 cps) 50 lb. bags, t.l., c.l., 30,000 lb. in., divd., zone 1 .... lb.	2.17	-
Hydroxypropyl methylcellulose (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.64	-
8-Hydroxyquinoline (see Oxyquinoline)		
Hypophosphorous acid, purif., 50% dms., c.l., works .... lb.	3.15	-

I

Ichthammol, NF, 200-kilo dms. .... lb.	4.25	4.50
Immodiacetic acid, 96% min., dms., c.l., t.l., works. .... lb.	3.00	-
Indole, dms. .... lb.	25.50	-
Inositol, 50-kilo dms., 1000 kilos or more, f.o.b. works. ..... kilo	17.50	22.00
Iodine, crude, dms. .... kilo	13.50	18.00
Iodine USP .... lb.	14.21	14.59
Iodochlorhydroxyquin, USP, XVI 50-kilo dms., 100-499 kilos, frt. alld. .... kilo.	35.00	45.00
Iodoform, NF, dms., 300-lbs., f.o.b. works. .... lb.	24.00	-
a-Ionone, dms. .... lb.	18.20	-
b-Ionone, dms. .... lb.	13.10	-
Ipecac root, whole, bgs. .... lb.	25.00	-
Irish moss, bleached, primo, whole. .... lbs.	.55	.80
Iron blue, alkali-resistant, bgs., l.c.l., ton lots, div. E. .... lb.	2.70	-
Iron blue, reg., bgs., l.c.l., ton lots, same basis. .... lb.	2.00	2.15
Iron, purif., powd., pails, 10-100-lb. lots. .... lb.	1.00	-
Iron oxide, black, syn., bgs., c.l., frt. equald. .... lb.	.68½	.75½
Iron oxide, brown, syn., bgs., c.l., frt. equald. .... lb.	.68	.78½
Iron oxide, metallic brown, l.c.l., bgs., frt. equald. .... lb.	.13	.15
Iron oxide, nat., red., dom., pure, bgs., c.l., works .... lb.	.275	.40
Iron oxide, yellow, ... lb.	.18	-
syn., bgs., c.l., frt. equald. .. lb.	.63	.71
Iron oxide, buff, nat., dom, bgs., c.l., t.l., works, light .... lb.	.75	.80
dark .... lb.	.60	-
other shades, bgs., c.l., frt. equald. .... lb.	.50	.55
Isatoic anhydride, bgs., f.o.b. works lb.	1.40	-
Isoamyl alcohol, 95% tanks, frt. alld. .... lb.	1.44	1.48
Isoborneol, 100 lb. dms. .... lb.	7.25	-
Isobornyl acetate, dms. .... lb.	.80	1.15
Isobutyl acetate, solvent grade, tanks, frt. alld. .... lb.	.45	.48
Isobutyl acrylate, tanks, frt. alld. E. . lb.	.71	-
Isobutyl alcohol, tanks, divd. ...... lb.	.29	-
Isobutylene, 99%, tanks, f.o.b. works .... lb.	.32	-
Isobutyl isobutyrate, tanks, f.o.b. works .... lb.	.42½	-
Isobutyl methacrylate, tanks, divd. . lb.	.87	-
Isobutyl phenylacetate, dms. ..... lb.	3.10	3.50
Isobutyl salicylate, dms. .... lb.	3.45	-
Isobutyraldehyde, tech., dms., c.l., divd. .... lb.	.43	-
tanks, divd. .... lb.	.35	-
Isobutyric acid, dms., c.l., t.l., divd. . lb.	No Prices	
tanks, same basis .... lb.	.75	
Isobutyronitrile, dms., c.l., f.o.b. works frt. collect. .... lb.	.84	-
tanks, same basis .... lb.	.75	-
Isoeugenol, dms. .... lb.	5.20	5.60
Isoniazid, powd. .... kilo	12.00	-
Isonicotinic acid, hydrazine (see Isoniazid).		
Isononyl alcohol, dms., t.l. ...... lb.	.48	-
Iso-octyl alcohol, tanks, divd. ..... lb.	.44	-
Isophorone, tanks divd. .... lb.	.81	-
Isophthalic acid, 99%, bulk, f.o.b., Joliet, Ill., min. frt. alld. .... lb.	.48	-
Isophthalonitrile, bgs., t.l., works ... lb.	2.65	-
Isopropyl acetate, tanks, divd. .... lb.	.47	-
Isopropyl alcohol, anhyd., 99%, tanks, divd. .... gal.	1.38	-
refd., 95%, tanks, divd. .... gal.	1.31	-
refd., 91%, tanks, divd. .... gal.	1.25	-
Isopropyl ether, tanks, divd. ...... lb.	.44	-
crude, tanks, divd. .... lb.	.37	-
Isopropylamine, (see Mono-, Di- or Tri-).		
Isopropyl myristate, dms., t.l., E. ... lb.	1.19	1.50
Itaconic acid, retd. bgs t.l. .... lb.	1.45	1.48

J

J acid, paste, dms., works, 100% basis .... kilo	4.75	-
Japan wax, cs. .... lb.	5.50	5.60
Jojoba oil, 55-gal. dms., f.o.b. Arizona producing point .... gal.	55.00	60.00
Juniper berry oil, Italian .... kilo	47.00	-

K

Kaolin, water washed, fully calcined, bags c.l., f.o.b. Georgia .. ton	255.00	-
NF pwd., colloidal, bacteria controlled, 50 lb. bags., 5,000 lb. lots .... lb.	.24	-
Kaolin, uncalcined, No. 1 coating, bulk, c.l., f.o.b., Georgia ...... ton	94.00	-
No. 2 coating .... ton	75.00	-
No. 3 coating .... ton	73.00	-
No. 4 coating .... ton	70.00	-
filler, gen.l purpose, same basis .... ton	58.00	-
delaminated water washed, uncalcined paint grade 1 micron avg., same basis .... ton	182.00	-
dry-grd. airfloated soft, same basis .... ton	60.00	-
Karaya gum, No. 1, powd., bbls. ... lb.	2.25	-
No. 2, powd., bbls. .... lb.	1.95	-
Kola nuts, bgs. .... lb.	.50	.53

L

Lacquer diluent petroleum, 140F.-200F. b.r., t.c., New Jersey and New York .... gal.	1.26	-
Houston, Texas .... gal.	1.29	-
Lacquer diluent, petroleum 200F.-240F. b.r., tankcars, New York and New Jersey .... gal.	1.20	1.25
Houston, Tex. .... gal.	1.12	-
Lactic acid, food grade 88%, t.c., f.o.b. works. .... lb.	1.06	-
50%, t.c., frt. equald. .... lb.	.62	-
tech., 88%, t.c., frt. equald. ... lb.	1.03	-
Lactose, edible, reg. bgs., c.l., works .... lb.	.22	.28
Lactose, USP, reg. dms., c.l., t.l., frt. equald. .... lb.	.55	.69
Lactose, USP, spray dried, bgs., t.l., frt. equald. .... lb.	.60	-
Lake C, red toner. (red 53) bbls., frt. alld. .... lb.	5.70	-
Lanolin, anhyd., cosmetic 400-lb. dms., works. .... lb.	1.18	1.25
pharmaceutical, 400-lb. dms. works. .... lb.	1.15	-
tech., (under 2% f.f.a.), 400-lb. dms., works. .... lb.	1.08	1.13
Lard (See Oils, Fats & Waxes market report.)		
Lard oil, No. 1, dms., c.l., f.o.b. .... lb.	.34	-
tanks, same basis .... lb.	.28	-
Lard oil, extra, winter-strained, dms., c.l. .... lb.	.41	-
tanks, same basis .... lb.	.33	-
prime, burning, dms., c.l., same basis, Chicago. .... lb.	.43	-
prime, burning, tanks, same basis. .... lb.	.35	-
NOTE: 300 Mi. rad. 1¼c. higher, except Texas, 2c., and West Coast, 3c. higher.		
Laurel leaves, Turkish .... lb.	3.00	3.10
Laurent's acid, drums, f.o.b. ...... lb.	3.85	-
Lauric acid, coml., pure bgs., c.l. ... lb.	.65	.71
Lauric aldehyde (aldehyde C-12). dms. .... lb.	7.75	-
n-Lauryl methacrylate, dms., c.l., t.l., works. .... lb.	1.72	-
Lavandin oil, Abrialis, 30-32%, dms. lb.	4.00	-
Lavender flowers, ord. .... lb.	.65	.75
medium, bls. .... lb.	.80	.90
select. bls. .... lb.	1.10	1.19
Lavender flower oil, NF, French, ... 40-42%, ester, cns. .... lb.	9.25	13.50
spike, Spanish, dms. .... kilo	15.00	22.00
Lead acetate, purif., flake. 400-lb. dms., works. .... lb.	.46	-
tech., flake, t.l., 400lb. dms., works. .... lb.	.37	-
Lead blue, basic, sulfate, bbls., c.l., ship, t. pt., f.o.b. .... lb.	.87	-
Lead carbonate. (see Lead white basic carbonate).		
Lead chloride, 400-lb. dms., works. lb.	3.25	-
Lead dioxide, tech., powd., 200-lb. dms., t.l., works. .... lb.	.66	.70
Lead fluoborate, liq. conc., dms., t.l., works, frt. equald. .... lb.	.65	-
Lead metal, divd. .... lb.	.24	-
Lead monosilicate, milled, bgs., c.l., f.o.b. works. .... lb.	.58½	-
coarse, bgs., c.l., same basis ... lb.	.57½	-
Lead naphthenate liq., 24% Pb. dms., frt. alld. .... lb.	.93	-
Lead nitrate tech., cryst., 400-lb. dms., t.l., works. .... lb.	.32½	-
Lead peroxide (see Lead dioxide).		
Lead red, 95% Pb_3O_4, or less, bgs. c.l., works. .... lb.	.37	-
Lead red, 97% Pb_3O_4, bgs. c.l., works. .... lb.	.37½	-
Lead, red, 98% Pb_3O_4, bgs., c.l., same basis. .... lb.	.37½	.40½
Lead silicate (see Lead, white, basic silicate).		
Lead silicochromate, bgs., c.l., works. .... lb.	.35	-
Lead sulfate (see Lead, blue, basic sulfate and Lead, white, basic sulfate)		
Lead, white, basic carbonate, bgs., c.l., frt. alld. .... lb.	.62	-
Lead, white, basic, silicate, bgs., c.l., same basis. .... lb.	.87	-
Lead, white, basic sulfate, bgs., c.l., same basis. .... lb.	.85	-
Lecithin, edible, tech., bleached, non-ret. dms., l.c.l., works ..... lb.	.36	-
unbleached non-ret. dms., l.c.l., same basis. .... lb.	.34	-
edible, tech. bleached, non-ret., dms., t.l., works .... lb.	.28	-
unbleached, non-ret., dms., t.l., same basis. .... lb.	.26	-
Lemon oil, Argentina .... kilo	14.00	-
Brazil .... lb.	6.50	7.00
Calif., USP. dms. .... lb.	9.00	9.35
Italian .... lb.	12.50	-
Lemongrass oil, Indian, dms. ..... kilo	11.25	-
Guatemalan, dms. .... lb.	2.25	-
dl-Leucine, dms., 1 kilo works. ... kilo	60.00	90.00
Licorice root, whole, bls. .... lb.	.40	.50
gran., bls. .... lb.	.70	.90
powd., bls. .... lb.	.95	-
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).		
Lime, chemical, pebble (quicklime), bulk, 50,000 lbs., works, f.o.b. plants .... ton	39.00	45.00
Lime, chemical, hydrated, bulk, same basis .... ton	46.00	50.00
bgs., same basis. .... ton	54.00	57.00
Lime, NF, purif., 100-lb. dms. .... lb.	.69	-
Lime oil, dist., Mexican, dms. ..... lb.	6.00	-
Haitian, dist., dms. .... lb.	6.50	-
expressed, dms. .... lb.	17.50	-
Lime salts (see Calcium).		
d-Limonene, dms. .... kilo	.70	.85
Linalool ex bois de rose oil, dms .... lb.	6.36	-
syn., 98-100% dms., f.o.b. works. . lb.	2.93	-
Linalool oxide, syn., 55-gal. dm. ... lb.	7.76	-
Linalyl acetate ex bois de rose oil, 90-92%, dms. .... lb.	18.00	21.00
syn. 98-100%, dms., f.o.b. works. lb.	3.10	-
Linalyl benzoate, syn., 55-gal. dms. lb.	8.00	-
Linalyl cinnamate, syn., 55-gal. dms. .... lb.	59.85	-
Linalyl formate, syn., 55-gal. dms. .. lb.	7.76	8.50
Linalyl isobutyrate, syn., 55-gal. dms. .... lb.	6.50	6.55
Lindane, 20% formulation, dms., divd .... gal	13.10	-
99.9% tech., dms., t.l., divd .... lb.	6.50	-
Linalyl propionate, syn., 55-gal. dms. .... lb.	7.90	-
Linden flowers, with leaves, bls. ... lb.	.76	.85
without leaves, bls. .... lb.	.90	1.15
Linseed meal (see Oils, Fats & Waxes market report).		
Linseed oil, (see Oils, Fats & Waxes market report)		
Linseed oil fatty acid, dist., dms. ... lb.	.60	.67
tanks .... lb.	.53	.62
Litharge, coml., powd., bgs., c.l., works. .... lb.	.36½	.60
Lithium bromide, anhyd., dms., ton lots, divd. .... lb.	6.27	-
soln., same basis. .... lb.	4.00	-
Lithium carbonate, powd., bgs., c.l., t.l., divd. .... lb.	1.60	-
Lithium chloride, anhyd., c.l., t.l., divd. .... lb.	3.32	-
soln., dms., c.l., t.l., divd. ..... lb.	2.94	-
Lithium fluoride, dms., c.l., t.l., divd. lb.	4.90	-
Lithium hydride, c.l., t.l., divd. 10,000 or more .... lb.	23.50	-
Lithium hydroxide, monohydrate, dms., c.l., t.l., divd. .... lb.	1.93	-
Lithium hypochlorite, c.l., t.l., works. lb.	1.07	-
Lithium metal, 1,000 lb. lots or more, divd. .... lb.	22.70	-
Lithium nitrate, tech., dms., 100-lb. lots .... lb.	3.25	-
Lithium stearate, bgs., c.l., frt. alld. . lb.	1.01	-
Lithium sulfate, anhydrous, t.l. divd. lb.	3.09	-
Lithol red toner, barium, dms., frt. alld .... lb.	3.27	-
calcium, dms., same basis. ... lb.	3.50	-
Lithol rubine toner (red 57), rosinated, dms., frt. alld .... lb.	5.60	-
Locust bean gum, powd., bgs. .... lb.	6.00	6.75
2,4-Lutidine, dms., t.l., frt. equald. kilo	5.75	-
Lycopodium, 50 lb. dms .... lb.	8.00	10.00
1-Lysine monohydrochloride, feed grade, 10,000 lbs. divd. .. lb.	1.35	1.40

M

Mace, East Indian, siftings, ... lb.	4.95	5.00
Siauw #2 .... lb.	5.60	5.75
Magnesia, tech., light, neoprene-grade, bgs., c.l., t.l., works lb.	.75	.81
Magnesia, syn, tech., chemical-grade, bulk, c.l., t.l. works .... ton	330.00	-
bags, c.l., t.l., same basis ... ton	365.00	-
deadburned, bulk, same basis .... ton	392.00	-
bgs., same basis .... ton	409.00	-
Magnesia, nat., tech., heavy, 85%, 150 mesh, bulk, c.l., t.l., f.o.b. Nev. .... ton	232.00	-
90%, 325 mesh, same basis .. ton	285.00	-
Magnesium bromide, 80-lb. dms., hexahydrate .... lb.	2.50	-
Magnesium carbonate, light, tech., bgs., c.l., t.l., works, frt. equald. .... lb.	.73	.78
USP, lite bgs., c.l., same basis. . lb.	.74	.81
USP, heavy, bgs., c.l., same basis . lb.	.83	-
Magnesium chloride, anhyd., 92%, flake or pebble dms., c.l., works .... lb.	.12¾	.15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works. ... lb.	.14½	-
Magnesium gluconate, 100-lb. dms. f.o.b. works, E. .... lb.	4.25	-
Magnesium hydroxide, NF, powd., dms., c.l., t.l., works frt. equald .... lb.	.78	-
Magnesium lauryl sulfate, tanks, f.o.b. works. .... lb.	.22	.26½
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more. f.o.b. Freeport, Tex. .... lb.	1.53	-
die casting alloys .... lb.	1.29	1.33
Magnesium nitrate, tech., flake, 250-lb. dms., t.l., works .... lb.	.32	-
Magnesium oxide, USP, light, bgs., c.l., works, frt. equald. .... lb.	1.65	-
heavy, dms., c.l., same basis. ... lb.	1.54	-
Magnesium oxide, tech. (see Magnesia).		
Magnesium phosphate, tribasic, tech. 60-lb. bgs., f.o.b. .... lb.	1.00	-
Magnesium silicate (see Talc).		
Magnesium silicofluoride, bgs., c.l., t.l. works. .... lb.	.1845	.1900
Magnesium stearate, bulk, t.l. ..... lb.	.95	1.36
Magnesium sulfate 10% Mg. (epsom salts), tech. bgs., t.l., works. .... lb.	.14	-
bulk, same basis .... lb.	.13	-
USP, cryst., bgs., same basis . lb.	.13½	-
USP, cryst., bulk, same basis . lb.	.14½	-
Magnesium sulfate, 17% Mg. (synthetic monohydrate). tech. bgs. t.l., works .... lbs.	.80	-
CP, same basis .... lbs.	1.25	-
Magnesium sulfate, anhydrous, CP bgs., t.l., works .... lbs.	1.75	-
Magnesium sulfate trihydrate, tech., bgs., t.l., works .... lb.	.45	-
Magnesium trisilicate, USP, powd., fib. dms. 5,000-lb. lots .... lb.	.38	-
USP, micronized powd., dms., 375-lb. lots. .... lb.	.63	-
Malathion, tech., dms., t.l., works. . lb.	1.62	-
Maleic acid, cryst., powd., drums, 100 kilos, f.o.b. .... kilos	3.20	-
drums, tons, f.o.b. .... kilos	2.80	-
Maleic anhydride, bgs., t.l., works, frt. equald. .... lb.	.55	.59
tanks, works, frt. equald. ...... lb.	.53	-
Malic acid, purif. and food grades. 50-lb. bgs., t.l., c.l., divd. ..... lb.	.81	.84
Mandarin oil (see Tangerine oil, Italian).		
Mandelic acid, dms., 1,000 kilo lots. .... kilo	8.00	10.00
Manganese acetate, dihydrate, dms., divd. .... lb.	.43½	.48
tetrahydrate, dms., t.l., divd. ... lb.	.48	.50
Manganese borate printing ink drier. lb.	1.68	1.80
Manganese borate, tech., dms. ..... lb.	.80	.86
Manganese carbonate, chemical grade, 46% Mn. bgs., 20,000-lb. lots or more, works. ... lb.	1.05	-
Manganese chloride, anhyd., dms., 20,000-lb. lots or more. ... lb.	.61	-
Manganese dioxide, nat., African, grd., 74%-76% MnO_2, 100-lb. bgs. t., works. .... ton	200.00	300.00
84% MnO_2, same basis. ...... ton	250.00	-
Manganese dioxide, syn., cryst., battery grade, 90%-92% MnO_2, 100-lb. bgs., c.l., works. .. lb.	.70	.87
chemical, ferrite grade, same basis. .... lb.	.48	.51
Manganese gluconate, FCC grade, 100-lb dms., f.o.b. works. . lb.	3.60	-
Manganese hydrate dms., divd. .... lb.	.35	-
Manganese hypophosphite, NF, dms., ... lb.	5.75	-
Manganese metal, electrolytic, No. 1 chip, bulk, c.l., works. ...... lb.	.55¾	-
dms., c.l., works. .... lb.	.54½	-
Manganese naphthenate, liq., 6% Mn. dms., divd. .... lb.	.57	-
Manganese resinate, fused, 3½% Mn. dms., frt. alld. .... lb.	.34¾	-
precip. 6½-7% Mn. dms. .... lb.	.42	-
Manganese sulfate, fertilizer grade, run-of-pile, 75%-78% $MnSO_4$, 25 kilo bgs., 50-ton cars, divd. E. of Miss. .... ton	280.00	-
bulk, hopper cars, same basis .. ton	245.00	-
Manganese sulfate, 28% Mn, gran., bgs., c.l., t.l., works ...... ton	330.00	-
Manganese tallate, liq., 6% Mn, dms., frt. alld. .... lb.	.60	-
Mannitol, coml., powd., dms., t.l., works. .... lb.	3.02	-
Marjoram, French .... lb.	.86	.89
Egyptian .... lb.	.61	.62
MBT (see 2-Mercaptobenzothiazole).		
MBTS (see Mercaptobenzothiazyl disulfide).		
MDI (see Diphenylmethane 4,4,-di-isocyanate)		
Melamine, bgs., c.l., t.l., 40,000-lb. min., f.o.b. works. .... lb.	.51½	.58½
bulk, c.l., t.l., same basis ...... lb.	.50	.58
Melamine-formaldehyde resin, g.p., t.l. frt. alld .... lb.	.55	.60
molding compounds, same basis .... lb.	.46½	-
Menhaden oil, crude, tanks, works Atlantic Coast .... lb.	.11	-
Gulf ports, same basis. .... lb.	.12	-
Menthol, nat., USP, Brazilian large and regular crystals, spot, cs., bulk. .... lb.	6.75	7.50
syn., USP, racemic, 100-450 lbs. lb.	9.00	-
2-Mercaptobenzothiazole, bgs., t.l., works, frt. alld. .... lb.	1.25	1.55
Mercaptobenzothiazyl disulfide t.l., dms., works, frt. alld. ...... lb.	1.33	1.66
Mercuric chloride NF, gran., powd., 100-lb. dms., f.o.b. works. . lb.	6.50	-
Mercuric oxide, red, purif., 100-lb. dms., f.o.b. works .... lb.	7.00	7.25
tech., 100-lb. dms., same basis. .... lb.	5.50	7.00
yellow, NF, 100-lb. dms., same basis. .... lb.	7.00	7.25
tech., 100-lb. dms., same basis. .... lb.	5.50	7.50
Mercurous chloride (see Calomel).		
Mercury, ammoniated (see White precipitate USP XV).		
Mesityl oxide, tanks, divd. .... lb.	.46	-
Methacrylic acid, glacial, 99%, dms., t.l., frt. equald. .... lb.	.87	-
tanks, works, frt. equald. ...... lb.	.78	-
d-Methamphetamine hydrochloride, dms. .... lb.	12.00	16.00
dl-Methamphetamine hydrochloride, dms. .... lb.	4.50	7.00
Methanol, syn., barges, f.o.b. producing point, Gulf Coast. .... gal.	.28	-
Methenamine (see Hexamethylenetetramine).		
Methionine hydroxyanalogue, dry, 86% activity t.l., frt. alld. ...... lb.	.86	-
liquid, 88% activity, t.l. frt. alld. .... lb.	.88	-
dl-Methionine (see Racemethionine)		
Methoxychlor, 50% wettable powder, dealers, dms. .... lb.	2.05	-
Methyl abietate, non-ret. dms., c.l., divd. E. .... lb.	9.40	-
Methyl abietate, hydrogenated, non-ret. dms., l.c.l., same basis. .... lb.	10.00	-
Methyl acetoacetate, East. divd. bulk. .... lb.	.85	-
Methyl acrylate, tanks, divd. ...... lb.	66.00	-
Methyl alcohol (see Methanol)		
Methyl amyl alcohol, tanks, divd ... lb.	.55	-
Methyl n-amyl ketone, tks., divd ... lb.	.54½	-
Methyl anthranilate, tech., dms., f.o.b. .... lb.	1.41	2.65
Methyl benzoate, dms., t.l. .... lb.	.25	-
99.9%, perf. grade, dms., t.l. .... lb.	1.65	-
Methyl bromide, dist., tanks, 140,000 lbs. min., frt. alld. .... lb.	.56¼	-
Methylcellulose, premium, USP (visc. 400 through 4,000 cps) 50 lb. bags, tl., cl., 30,000 lb., min., divd., zone 1 .... lb.	2.73	-
Methylcellulose, premium USP (visc. 15 cps) 50 lb. bags, tl., cl., 30,000 lbs., divd., zone 1. . lb.	2.85	-
Methylcellulose, (visc. 400 through 4,000 cps) 50 lb. bgs., tl., cl., 30,000 lbs., divd., zone 1. . lb.	2.24	-
Methylcellulose (visc. 15 to 25 cps) 50 lb. bags, tl., cl., 30,000 lb. min., divd., zone 1 .... lb.	2.52	-
Methyl chloride, indust. bulk, tanks, f.o.b. works .... lb.	.26	-
Methyl chloroform (see 1,1,1-Trichloroethane).		
Methyl cinnamate, dms. .... lb.	4.65	-
Methyl p-cresol, dms. .... lb.	6.00	-
Methyl ethyl ketone, tanks, divd, E. lb.	.235	-
Methyl eugenol, 25-lb. cns. .... lb.	3.55	3.80
Methyl formate, pure, non-ret. dms., works .... lb.	.41	-
tanks, same basis .... lb.	.29	-
tech., tanks, works .... lb.	.31	-
Methyl heptanol, syn., 55-gal. dms. lb.	14.50	-
Methyl heptenone, pure, dms. ...... lb.	7.30	-
Methyl heptin carbonate, dms. ..... lb.	45.00	-
Methyl p-hydroxybenzoate (see Methylparaben)		
Methyl ionone, std., dms. .... lb.	7.30	9.40
Methyl isoamyl ketone, tanks, divd E. .... lb.	.61	-
Methyl isobutyl carbinol (see Methyl amyl alcohol).		
Methyl isobutyl ketone, tanks, divd. lb.	.35	-
divd. zone 2 (Calif.) .... lb.	.38	-
divd. zone 3 (W. of Rockies, excluding Calif.) .... lb.	.41	-
Methyl isoeugenol, 25-lb. cns. ..... lb.	6.60	10.40
Methyl methacrylate, tanks, divd ... lb.	.62	-
Methyl naphthyl ketone, cryst., dms. .... lb.	14.00	-
Methylparaben, USP, 500 kilograms, f.o.b. .... kilo	10.14	-
tech., 500 kilograms, f.o.b. .... kilo	9.70	-
Methyl parathion, tech., 80%, dms., frt. alld. E. .... lb.	1.65	-
Methyl phenylacetate, dms. .... lb.	3.60	5.40
N-Methyl 2-pyrrolidone, tanks, f.o.b. plant .... lb.	1.32	-
dms., c.l., t.l., same basis ... lb.	1.40	-
Methyl rosaniline chloride, USP, 1-lb. cans. .... lb.	5.50	-
Methyl salicylate, NF, 1000-lb. dms., t.l., frt. alld. .... lb.	1.79	1.94
Methyl violet (see Methyl rosaniline chloride).		
Methyl violet toner, molybdated, PMA, bbls., divd. E. of Rockies. . lb.	3.25	-
Methyl violet toner, tungstated, PTA, bbls., same basis .... lb.	4.70	5.20
4,4,-Methylene dianiline (p,p-di-aminodiphenyl methane) crude, dms., t.l., f.o.b. ..... lb.	1.75	-
purif., flake, same basis .... lb.	2.25	-
Methylene di-p-phenylene di-isocyanate (see diphenylmethane 4,4,-di-isocyanate).		
Methylene chloride, tanks, 4,000 gal.-min., consumers, divd. ..... lb.	.35	-
Methylpentanediol (see Hexylene glycol).		
Methylphenylpyrazolone (see 1- Phenyl-3-methyl-pyrazolone-5).		
a-Methylstyrene, f.o.b. shipping pt. . lb.	.44	-
p-Methylnaphthalene, bulk, works. gal.	1.38	-
Methylthionine chloride (see Methylene blue).		
Mica, dry-grd., joint cement, plastic, 50 lb., bgs., c.l., works. .... lb.	.07½	-
dry-grd., roofing, 20 to 80 mesh. works. .... lb.	.07	-
paint or lacq., wet-grd., 325-mesh, bgs., c.l., f.o.b. works ...... lb.	.16¾	-
rubber, bgs., c.l., f.o.b. works ... lb.	.18¾	-
wallpaper, bgs., c.l., f.o.b. works. lb.	.22	-
Microcrystalline wax, petroleum, coating grades, FDA, tanks, works. .... lb.	.36½	.46½
laminating grades, FDA, tanks, works. .... lb.	.38½	.48
Mineral oil, white, 50-65 vis., USP light tanks, refy. .... gal.	2.38	-
65-75 vis., tanks, refy. .... gal.	2.42	-
80-90 vis., tanks, refy. .... gal.	2.45	-
145-155 vis., tanks, refy. ..... gal.	2.53	-
USP 180-190 vis., tanks, refy. .... gal.	2.54	-
200-210 vis., tanks, refy. ..... gal.	2.58	-
340-350 vis., tanks, refy. ..... gal.	2.65	-
Mineral spirits, petroleum, odorless, tanks, New Jersey. .... gal.	1.83	1.88
Houston, Tex. .... gal.	1.78	1.79
Mineral spirits, petroleum, regular, tanks, New Jersey .... gal.	1.41	1.49
Houston, Tex. .... gal.	1.41	1.43
Molybdate orange, bbls. .... lb.	1.52	1.95
Molybdenum metal, coml., powd., 99.8%, dms., works .... lb.	13.50	-
Molybdenum trioxide, CP, dms., works, 24,000 lbs. or more. lb.	5.25	-
tech., chemical, dms., 24,000 lbs. or more, basis, ... lb.	2.65	2.85
tech. metallurgical, dms. same basis. lb.	2.65	2.85
Molybdic acid (See Ammonium Dimolybdate)		
Monoammonium phosphate, fert. grade, min. 13% N. 52% P. bulk, c.l., f.o.b. Fla. works .... ton	155.00	-
Monoammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald. .... 100 lbs.	54.00	-
food grade, bgs., c.l., t.l., same basis. .... 100 lbs.	59.25	-
Mono-tert-butyl-m-cresol, bulk, t.l. . lb.	1.69	-
Monobutylamine, bulk, divd .... lb.	.96	1.00
Monochloroacetic acid, purif. (see Chloroacetic acid, mono).		
Monochlorobenzene, tanks, f.o.b. . lb.	.42½	-
Monoethanolamine, tanks, frt. alld. E. .... lb.	.43	.46
Monoethylamine, 70% aqueous tanks, frt. prepaid, 100% basis .... lb.	.94	-
anhyd., tanks, same basis ...... lb.	.92	-
Monoisopropanolamine, dms., c.l., frt. alld. E. .... lb.	.76	-
tanks, same basis .... lb.	.68	-
Monoisopropylamine, anhyd., dms., c.l., frt. prepaid .... lb.	.79	-
tanks, same basis .... lb.	.76	-
Monomethylamine, anhyd., tanks, contained basis frt. equald. ... lb.	.54½	-
25% soln., tanks, frt. alld. 100% basis .... lb.	.57	-
40-60% soln., tanks, frt. equald. 100% basis .... lb.	.63½	-
Monopotassium glutamate, dms., 990 lb. or more, frt. alld. .... lb.	2.50	-
Monosodium glutamate, 50-lb. bgs. c.l., t.l., divd .... lb.	.76	.80
100-lb. drums, c.l., t.l., divd ... lb.	.85	-
Monosodium phosphate (see Sodium phosphate, monobasic).		
Montan wax, crude, imp., German . lb.	.55	.57
dom., Calif., bgs., c.l., t.l., f.o.b. shipt. pt. .... lb.	.61	-
refd., dom. Calif., same basis ... lb.		
Morphine alkaloid, NF, 25 k lots .. kilo	1018.00	-
Morphine sulfate, USP, 25 k lots .. kilo	850.00	-
Morpholine, dms., c.l., frt. alld. E. ... lb.	1.02	-
tanks, frt. alld., E. .... lb.	.94	-
Muriatic acid (see Hydrochloric acid).		
Musk, syn., ambrette, 25-lb. cns. .. lb.	6.00	7.00
Musk, syn., ketone, dms. .... lb.	10.75	-
Musk, syn., xylol, dms. .... lb.	3.60	-
Mustard oil, syn. (see Allyl isothiocyanate).		
Mustard seed, Brown No. 1 .... lb.	.22	-
Canadian No. 1 Yellow. .... lb.	.23	-
Oriental No. 1 bgs. .... lb.	.22	-
Myrcia oil (see Bay oil).		
Myristic acid, coml., pure, t.l., bgs. . lb.	1.30	-
tanks. .... lb.	1.12	-
Myristica oil (see Nutmeg oil).		
Myrrh gum, bgs. .... lb.	2.25	-

N

Naphtha, high solvency (see Solvent naphtha, petroleum).		
Naphtha, petroleum, cleaners (see Cleaner's naphtha).		
Naphtha, VM&P, petroleum, tanks, New Jersey and New York .... gal.	1.29	1.34
Houston, Tex. .... gal.	1.20	-
Naphthalene, crude, dom., 78°, tanks, works. .... lb.	.22	-
Naphthalene, phthalic anhydride grade, tanks, works. .... lb.	.23½	-
Naphthalene, petroleum, 80°C., f.o.b. .... lb.	.30	.32½
Naphthalene, refd., balls, flakes, wholesalers, jobbers, dms., works. .... lb.	.68	.77
Naphthenic acid, crude, bulk, works lb.	.16	.32
refined, 220 acid, same basis ... lb.	.76	1.00
a-Naphthol, ground, dms., t.l. divd. .. lb.	1.81	-
b-Naphthol, tech. flake, 80-lb. bgs., c.l., works. .... lb.	1.10	-
Naphthol arylide red toner deep shades, bbls. .... lb.	9.50	-
light shades, bbls. .... lb.	7.75	-
2-Naphthol-3,6-disulfonic acid, disodium salt (see R salt).		
1-Naphthol-5-sulfonic acid (see L-acid).		
1-Naphthol-5-sulfonic 8-amino acid (see S acid).		
Naphthylamine sulfonic mixed acid (see Cleve's acid).		
a-Naphthylamine, tanks, f.o.b. works. .... lb.	2.10	-
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).		
2-Naphthylamine-4,8 disulfonic acid (see Cassella acid).		
2-Naphthylamine-1-sulfonic acid (see Tobias acid).		
Neatsfoot oil, 20°F, t.l., f.o.b. works dms. .... lb.	.52	-
tanks, f.o.b. works .... lb.	.47	-
30°F, t.l., f.o.b. works .... lb.	.52	-
tanks, f.o.b. works .... lb.	.44	-
40°F, dms., t.l., f.o.b. works .... lb.	.46	.49
tanks, f.o.b. works .... lb.	.39	-
Delivered prices apply on shipments within 300-mile radius of Philadelphia, Pa.; other areas, 1¼c. higher; Texas, 2c. higher and West Coast 3c. higher.		
Neomycin sulfate, USP, non-sterile, dms., 50-kilo. lots, activity basis, divd. .... kilo.	75.00	-
Neopentyl glycol, slurry, 90%, c.l., t.l., divd. .... lb.	.522	-
powder, flake, bgs. t.l., divd. .. lb.	.598	-
Nerol, tech., dms. .... lb.	5.30	5.75
perf. grade, dms. .... lb.	4.60	5.00
Neroli oil, Tunisian, bots. .... kilo	18,000.00	-
Nerolidol syn. 55-gal. dms. .... lb.	7.05	-
Nerolin, Bromelin. .... kilo	7.22	-
Niacinamide, USP, t.l. dms. ...... kilo.	8.00	-
Niacin NF, dms., 5,000 kilos or more, divd. .... kilo	7.50	-
feed-grade, 98-99.5%, bgs., same basis. .... kilo.	5.10	5.60
Nickel acetate, dms., 5,000-lbs. to t.l., divd. E. .... lb.	1.82	-
Nickel carbonate, dms., bgs., 5,000-lbs. to t.l., divd. E. .... lb.	3.45	-
Nickel chloride, bgs., 10,000-lbs. to t.l., divd. E. .... lb.	1.19	-
Nickel fluoborate, liq. conc., dms., t.l., divd. E. .... lb.	1.25	-
Nickel metal, electro cathodes, cs., works. .... lb.	3.45	-
Nickel nitrate, dms., bgs., t.l., divd E. .... lb.	1.18	-
Nickel oxide, 75%-78% Ni, dms., 500-lb. lots, f.o.b. works .... lb.	2.60	-
Nickel sulfate, bgs., t.l., divd. E. .... lb.	.80	.90
Nicotinic acid (see Niacin).		
Nicotinamide (see Niacinamide).		
Nitric acid, 36° Be., 38°Be, 40°Be, 42°Be. tanks, c.l., works NF. 100% basis .... ton	195.00	-
94½% to 98% HNO_3, tanks, works, 100% basis .... ton	280.00	-
o-Nitroaniline, flake, dms., t.l. works. .... lb.	1.51	-
molten, refd., tanks, works ..... lb.	1.44	-
molten, tech., works .... lb.	1.37	-
o-Nitroaniline, orange toner, bgs., frt. alld. .... lb.	1.90	-
p-Nitroaniline, dms., c.l., t.l., 30,000 lb. min., works .... lb.	1.63	-
o-Nitroanisole, 100-kilo lots .... kilo	6.76	-
Nitrobenzene, tanks, f.o.b. .... lb.	.33	.34
o-Nitrochlorobenzene, dms., t.l., c.l., f.o.b. .... lb.	.82	-
tanks, same basis .... lb.	.74	-
2-Nitro-p-cresol, tech., dms., t.l., frt. alld. .... lb.	1.75	-
Nitroethane, tanks, divd E. .... lb.	2.50	-
Nitrogen solutions, direct application, over 32% N, and mgf. type, works. .... unit-ton.	1.20	-
direct application, 19-32% N. .... unit-ton.	1.26	1.46
Nitrogenous sewage sludge, processed, bulk, f.o.b. Chicago. .... unit ton.	4.10	-
NOTE: Price is per unit NH_3 plus $1, per unit a.p.a. bulk, f.o.b. producer,s works, Chicago.		
Nitrogenous tankage, processed, bulk, per unit-ton NH_3, f.o.b. Carrollville, Wisc. .... unit ton	7.00	-
f.o.b. Forbes, Me. .... unit ton	6.75	-
expanded, bulk, c.l., per unit-ton N, f.o.b. Forrestdale, R.I. unit ton	8.35	-
Nitromethane, dms., t.l., divd. E. ... lb.	2.37	-
o-Nitrophenol, dms., f.o.b. works ... lb.	1.00	-
p-Nitrophenol, dms., c.l., f.o.b. works. .... lb.	1.05	1.45
2-Nitropropane, tanks, frt. alld. E. .. lb.	.55	-
m-Nitrotoluene, tech., dms., frt. alld. lb.	1.15	-
o-Nitrotoluene, dms., c.l., f.o.b. .... lb.	.65	-
tanks, same basis .... lb.	.48	.57
p-Nitrotoluene, tech. dms., c.l., works. .... lb.	.83	.85
tanks, works. .... lb.	.70	-
Nonylphenol, tanks, f.o.b. E. of Rockies, min. frt. alld. .... lb.	.49	.53½
Norephedrine hydrochloride (see Phenylpropanolamine hydrochloride)		
Nutmeg oil, dist., East Indian, NF, dms. .... kilo	27.00	28.50
Nutmegs, East Indian, whole. ..... lb.	3.15	-

O

Ochre (see Iron oxide, yellow, nat.)		
Ocotea cymbarum oil dms. .... kilo	5.00	-
Ocotea, Chinese 90% .... kilo	5.25	-
1-Octadecanol, syn., tanks, f.o.b. ... lb.	.43½	-
1-Octanol, syn., tanks, f.o.b. ...... lb.	.70	-
n-Octane, 97% min., tanks, f.o.b. Houston, Tex. .... gal.	6.25	-
Octyl alcohol, perfumer's grade, bots., cns. .... lb.	1.40	1.75
n-Octyl, n-decyl phthalate, tanks, divd. .... lb.	.33½	.37
tert-Octylamine, dms., c.l., t.l., works.	2.60	-
Octylphenol, molten. t.c., works. .... lb.	.75	.76½
Oiticica oil, liq. dms. .... lb.	.40	-
tanks .... lb.	.32	-
Oleic acid, dbl.-dist., (white), dms ... lb.	.48	.59
tanks. .... lb.	.38	.44
Oleic acid, s.d. (red) dms. .... lb.	.43	.49
tanks .... lb.	.35	.41
Oleum (see Sulfuric acid, fuming).		
Olibanum gum, tears, bgs. .... lb.	2.10	-
Olive oil, edible, Spanish, dms. .... gal.	8.00	-
Italian B-type .... gal.	5.40	5.50
Olivine, crude, works .... ton	12.00	-
20 mesh. works .... ton	15.00	-
100 mesh. works .... ton	20.00	-
Opium, USP, gran. powd. 25-kilo lots. .... kilo	125.00	-
Orange oil, expressed, USP, Calif., dms., f.o.b. plant .... lb.	1.20	-
expressed Valencia, dms. .... lb.	1.00	1.20
Calif., dist., cns. f.o.b. plant ..... lb.	.40	-
Florida, dms. .... lb.	.50	.55
Brazilian .... kilo	1.20	-
West Indian, bitter, NF X, cns., dms. .... lb.	13.00	-
Orange peel, bitter, Haitian bls. .... lb.	.36	-
Oregano, Greece, 30M .... lb.	2.80	-
Turkey .... lb.	2.80	-
Mexico .... lb.	1.05	-
Origanum oil, Spanish, cns. .... kilo	35.00	-
Orris root, Florentine, bls. .... lb.	4.00	-
powd., bbls., bxs. .... lb.	4.60	5.00
Verona bls. .... lb.	3.00	-
powd., bbls., bxs. .... lb.	4.60	5.00
Ouricury wax, refd., pure, bgs. .... lb.	3.26	3.35
Oxalic acid, bgs., c.l., works ...... lb.	.44	-
b-Oxynaphthoic acid dms. works, tech. .... lb.	2.55	-
Oxyquinoline base, pure, 1,000 lbs., frt. alld. .... lb.	8.00	-
Oxyquinoline sulfate, 100 lbs. frt. alld. .... lb.	4.00	-

P

Palladium metal, works. .... Troy-oz.	138.00	-
Palm oil, (see Oils, Fats & Waxes Market Report)		
Palm oil acid, dbl-dist. dms .... lb.	.31½	-
tanks. .... lb.	.30	-
s.d., dms. .... lb.	.42	.45
tanks .... lb.	.35	-
Palm kernel oil, bulk, c.i.f. U.S. ports .... lb.	.10	.10½
Palmarosa oil, Indian dms. ...... kilo	36.00	-
Palmitic acid, 90%, tech., bags .... lb.	.53	-
tanks .... lb.	51	-
Papaverine hydrochloride, NF powd., imp. bulk .... kilo	56.00	-
Paprika, Hungarian, 100 AU bgs. .. lb.	.80	-
Spanish, 110 AU bgs. .... lb.	.90	-
Paraffin, fully-refd., 127-130 F., ASTM, tanks, refy	.29	.35
130-135 F., ASTM, tanks, refy.	.33½	.39
140-145 F., ASTM, tanks, refy.	.35	41½
150-155 F., ASTM, tanks, refy.	.41½	.46
slack wax, 5% oil, tanks refy	.19	-
12% oil, tanks refy	.21	-
20% oil, tanks refy	.16	-
AMP temperatures are an arbitrary 3F higher than ASTP.		
Paraformaldehyde, 91%, flake, bgs. c.l., t.l., divd. .... lb.	.29½	-
95%, powd., bgs., c.l., t.l. divd. lb.	.39½	-
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd. E. .... lb.	.76½	-
tanks, divd. E. .... lb.	.58½	-
Parathion, ethyl, dms., frt. alld. .... lb.	1.75	-
Parathion methyl (see Methyl parathion).		
Para toner red, bbls. .... lb.	3.75	-
chlorinated, (red 4) kgs. .... lb.	3.75	-
Patchouli oil, Indonesian, dms. .... kilo	18.50	20.00
Patchouli oil, Chinese. .... kilo	19.00	20.00
Peach kernel oil, USP (see Apricot kernel oil).		
Peanut meal (see Oils, Fats & Waxes market report).		
Peanut oil (see Oils, Fats & Waxes market report).		
Pectin dom., NF, citrus, powd., 100-kilo lots divd. .... lb.	3.30	3.70
Pelargonic acid, nat., tanks, min. frt. alld. .... lb.	.70	-
syn., tanks, f.o.b. frt. alld. ... lb.	.70	-
Penicillin, potassium, non-sterile, 200-billion-unit lots, ... billion units	25.00	30.00
Penicillin, procaine, sterile 50- billion-unit lots, bulk.... billion units.	36.00	-
Pennyroyal oil, dms. .... lb.	5.90	-
Pentachlorophenol, 50-lb. bgs., t.l., f.o.b. Wichita, Kan. .... lb.	.55	-
Pentaerythritol, tech., bgs., c.l. f.o.b., frt. alld. .... lb.	.71	.72
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).		
Pentaerythritol triacrylate, t.l. dms., f.o.b. works, ... lb.	1.60	-
Pentobarbital, dms., 100 lbs. or more, frt. alld. .... lb.	7.00	-
Pentobarbital-sodium, dms., 100 lbs. or more, divd. .... lb.	14.00	-
Pentylene tetrazol, NF, dms., 200-kilo lots. .... kilo	32.00	-
Pepper, black, Brazilian, bgs. ..... lb.	2.28	-
Lampong, bgs. .... lb.	2.30	-
Malabar, bgs. .... lb.	2.28	-
Tellicherry, bgs. .... lb.	2.35	-
Pepper, red Chinese Fukien rice bgs lb.	.89	-
Hainan, bgs. .... lb.	1.00	-
Lling, bgs. .... lb.	.76	-
Indian, S-4, bgs. .... lb.	.70	-
Pakistan, dundicuts, bgs. ...... lb.	.43	-
Pepper, white, Muntok, bgs. ...... lb.	3.05	-
Peppermint leaves, imp., dms. ..... lb.	2.65	-
Peppermint oil, Madras .... lb.	14.00	-
Midwest .... lb.	16.00	-
Willamette .... lb.	11.00	-
Yakima .... lb.	8.00	-
syn., dms, f.o.b. works .... lb.	7.00	9.00
Brazilian .... kilo	6.50	-
Chinese .... kilo	6.90	-

CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

Perchloroethylene, dry cleaning grade, distr., tanks, dlvd. ....lb.	.28½	–
Indust., grade, consumers, tanks, dlvd. ....lb.	.31	–
Perlacid. dms. ....lb.	2.55	–
Permanent red 2B, (red 48), calcium salts, dms., frt. alld. ....lb.	5.25	–
barium salts, same basis. ....lb.	5.25	–
Peru balsam, f.o.b. ....lb.	3.25	–
Petitgrain oil, Paraguay ....lb.	5.00	–
Petrolatum, USP, snow white, dms., c.l., refy ....lb.	.375	–
tanks, refy ....lb.	.310	–
USP, soft white, dms., c.l., refy. ..lb.	.375	–
tanks, refy. ....lb.	.310	–
USP, lily white, dms., c.l., refy. ...lb.	.370	–
Petrolatum, USP, Lily white, tanks, refy. ....lb.	.305	–
USP, cream, dms., c.l., refy .....lb.	.385	–
tanks, refy. ....lb.	.30	–
USP, soft yellow, dms., c.l., refy. .lb.	.350	–
tanks, refy ....lb.	.285	–
USP, amber, dms., c.l., refy. .....lb.	.345	–
tanks, refy ....lb.	.280	–
Petroleum pitch (see Asphalt, petroleum).		
Petroleum sulfonate, 60-62%, sulfonic cont., HMW, bulk, works ..lb.	.48¾	.49
MMW, same basis ....lb.	.49	–
LMW, same basis ....lb.	.49	.49¼
Prices for 51% sulfonic content 2c per lb. lower on corresponding molecular wts.		
Phenacetin USP, powd., 200-lb. dms., 1,000-lb. lots, dlvd. ....lb.	2.20	–
100-lb. dms., 1,000-lb. lots, dlvd lb.	2.22	2.45
p-Phenetidine, dms., c.l., f.o.b. ....lb.	2.00	–
Phenobarbital, USP, dms., 500-kilo lots., f.o.b. works ....kilo	19.50	–
Phenobarbital-sodium, NF, 500-kilo lots, f.o.b. works ....kilo	27.00	–
Phenol, syn. tanks, frt. equald. .....lb.	.25	.29
p-Phenolsulfonic acid, 65% sol'n., dms., c.l., fob works .....lb.	.64	–
tanks, same basis. ....lb.	.58	–
Phenothiazine, indust. grade, 50-lb. bags, c.l., f.o.b. works ....lb.	2.33	–
purif. grade, same basis ....lb.	2.69	–
Phenyl acetate, dms., 100-lb. lots, works. ....lb.	1.04	–
Phenylacetic acid, pure cryst., 25-lb. cns. ....lb.	4.50	–
dl-Phenylalanine, dms., 25-kilo lots. ....kilo.	84.00	–
1-Phenyl-3-carbethoxy pyrazolone-5, dms. 200-lb. lots, dlvd. E. ..lb.	3.45	–
m-Phenylenediamine, cast, dms., c.l., t.l., f.o.b. works ....lb.	2.07	–
o-Phenylenediamine, flaked, dms., t.l., f.o.b. works ....lb.	3.25	–
p-Phenylenediamine, flaked, dms., f.o.b. works ....lb.	4.00	–
Phenylephrine hydrochloride, USP 100-kilo lots or more ....kilo.	175.00	185.00
Phenylethyl acetate, dms. ....lb.	3.35	–
2-Phenylethyl alcohol, NF, dms. ....lb.	2.10	2.20
b-Phenylethylamine, dms., 30,000 lbs. or more, frt. alld. ....lb.	1.50	–
Phenylethylphenyl acetate, 25-lb. cns. ....lb.	5.50	6.90
Phenylglyconic acid (see Mandelic acid).		
Phenylhydrazine, 99% min., dms. ..lb.	3.50	–
1-Phenyl-3-methyl-5-pyrazolone, dms., 250-lb. lots dlvd. E ..lb.	1.80	–
o-Phenylphenol, dms., t.l., works ..lb.	1.35	2.00
p-Phenylphenol, bgs., t.l., 40,000 lbs. or more, works. ....lb.	1.85	–
Phenylpropanolamine hydrochloride, 100-kilo dm. ....kilo	24.00	28.00
Phenylsalicylate, purif. cryst., dms., E. ....lb.	2.75	–
tech., cryst., E. ....lb.	2.26	–
flake, E. ....lb.	2.35	–
Phloxine toner (red 90), dms., frt. alld. ....lb.	1.95	2.05
Phosgene, 1-ton ret. cyls., 5 to 9-cyl. quantities, works. ....lb.	.55	.67
Phosphate rock, Fla., land pebble, run of mine washed, 66-68% b.p.l. bulk c.l. mines ....ton	23.15	–
vessel, Tampa, same basis ....ton	26.00	–
Phosphoric acid, com'l. and tech. grades, 75% tanks, works. ....100 lbs.	29.00	–
80% tanks, works ....100 lbs.	31.00	–
85%. N.F. tanks, f.o.b. freight equald. ....100 lbs.	33.50	–
Food grade prices $2.00 above tech. grade.		
Phosphoric acid, agricultural grade, 52-54% a.p.a., tanks, works ....unit-ton	3.10	–
super, min. 70% a.p.a., same basis. ....unit-ton.	3.45	–
Phosphorus, white (yellow) solid dms., c.l., works, frt. equald. .....lb.	1.00	–
tanks, works, f.o.b. works. ..lb.	.91	–
Phosphorus oxychloride, tanks, frt. equald. ....lb.	.40	–
Phosphorus pentasulfide, powd., dms., c.l., works. ...100 lbs.	50.00	–
tote bins, sellers ....100 lbs.	45.00	–
Phosphorus pentoxide, dms., t.l., works. ....lb.	.82	–
Phosphorus sesquisulfide, dms., cvs., c.l., works. ....lb.	.38	–
Phosphorus trichloride, dms., c.l., works. ....lb.	.40	–
tanks, works. ....lb.	.35	–
Phthalic anhydride, flake, c.l., t.l., dms., frt. equald. ....lb.	.30	–
molten, tanks, same basis ....lb.	.27	–
Prices 1-1½c. per lb. higher on the West Coast		
Phthalimide, flake, works ....lb.	.85	–
Phthalocyanine blue toner, red shade, bbls., frt. alld. E. of Rockies ....lb.	8.10	9.50
green shade, same basis ....lb.	6.40	8.60
resinated, bbls., same basis .....lb.	8.20	8.75
Phthalocyanine blue toner, water dispersable, bbls., same basis. ....lb.	7.05	7.75
Phthalocyanine green toner, all grades, bbls., frt. alld. E. of Rockies. ....lb.	8.10	10.10
Phthalocyanine green toner, resinated, bbls., same basis. ....lb.	7.45	9.20
Phthalylsulfacetamide, dms., 500-kilo lots. ....kilo.	6.61	–
Picolines, refd, mixed, bulk ....kilo	2.81	–
Picric acid, pure paste, 25-lb. ctns., c.l., dry basis, f.o.b. Charlotte, N.C. ....lb.	6.00	–
tech., paste, 25-lb. ctns., t.l., dry basis, f.o.b. Charlotte, N.C. ..lb.	5.00	–
Pigment green B, kgs. ....lb.	2.20	–
Pilocarpine hydrochloride, USP, dms. ....kilo.	1,500.00	2,000.00
Pimento see Allspice		
Pimento leaf oil, dms. ....lb.	14.50	–
Pine oil, 80% min. alcohol content, bulk, f.o.b. works....100 lbs	47.00	53.00
dms., c.l., t.l., same basis ....100 lbs	51.00	54.00
a-Pinene, perfume grade. ....kilo	1.62	–
tech. grade. ....lb.	.18	.23
b-Pinene, perfumery grade. tanks. .kilo	2.30	–
tech. grade. tanks ....lb.	.35	.40
Piperazine, anhyd., dms., t.l., frt. alld. E. ....lb.	1.80	–
Piperazine citrate, 36%, dms., 1,100-lb. lots, frt. alld. ....lb.	2.25	2.35
Piperazine dihydrochloride, 53%, dms., t.l., frt. alld. ....lb.	2.00	–
Piperazine hexahydrate, 44%, dms., 1,100-lb. lots, frt. alld. .....lb.	1.60	–
Piperazine phosphate, 42%, dms., t.l., frt. alld. ....lb.	1.80	–
Piperidine dist. 98% min., dms., c.l., t.l., works. ....kilo.	6.92	–
Piperonyl butoxide dms., dlvd. E. ..lb.	5.00	–
Platinum, metal, works ...... Troy oz.	577.00	–
Polycarbonate resin, pellets, nat., t.l., frt. alld ....lb.	1.84	1.86
Polyester resin, unsaturated, g.p., orthophthalic, bulk, tankcars, frt. alld ....lb.	.51	.53
Isophthalic, same basis ....lb.	.56	.62
Polyethylene resin, high-density, blow molding, g.p., hopper cars, frt. alld. ....lb.	.43	.46
injection molding, g.p., hopper cars, frt. alld. ....lb.	.43	.46
extrusion, g.p., hopper cars, same basis ....lb.	.47	.48
wire and cable, nat., hopper cars, same basis. ....lb.	.45	.49
wire and cable, black, same basis ....lb.	.55½	.57
Polyethylene resin, low-density, film liner, hopper cars, frt alld ..lb.	.36	–
clarity film, hopper cars, frt., alld. ....lb.	.37	–
pallet shrink film, hopper cars, same basis. ....lb.	.35	–
extrusion coating, hopper cars, same basis. ....lb.	.38	.42
g.p., hopper cars, same basis .lb.	.38	.42
Polyethylene linear low-density g.p. resin.	.36	.40
blown film resin	.40	.43½
cast film resin.	.40	.45
Polyethylene resin, low-density injection molding, g.p., hopper cars, same basis ....lb.	.45	.48
fine wire, CATV, power cable. ..lb.	.647	–
wire and cable thermoplastic high-voltage, natural color, same basis ....lb.	.70	.74½
wire and cable, XLPE low voltage, 14% carbon black, same basis ....lb.	.67½	.72½
wire and cable jacketing, black lb.	.587	.667
Polymyxin sulfate, USP, bulk, 50-billion units min. ......million units	.52	–
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works. ....lb.	.73	–
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works. ....lb.	.73	–
Polypropylene resin, homopolymer, g.p., nat., t.l., frt. alld. .....lb.	.45	.48
copolymer, med. impact, nat., same basis ....lb.	.50	.56
high impact, same basis ....lb.	.53	.60
Colored material 5c. per lb. higher for each grade.		
Polystyrene resin, cryst., nat., hopper cars, frt. alld. ....lb.	.48	–
impact, nat., hopper cars, same basis ....lb.	.51	–
high heat, high impact, nat., hopper cars, same basis ....lb.	.52	–
expandable beads (EPS), pkging grade, 1,000-lb. lots ......lb.	.69	–
modified, same basis. ....lb.	.73	–
Polyvinyl alcohol, fully hydrolyzed, medium viscosity, bgs., t.l., dlvd. ....lb.	1.00	1.05
partially hydrolyzed, medium viscosity, bgs., t.l., dlvd. ....lb.	1.05	–
Polyvinyl chloride resin, g.p., homopolymer dispersion, bgs., t.l., dlvd. ....lb.	.50	–
g.p. suspension, bulk, same basis ....lb.	.38	–
pipe grade, bulk, same basis ....lb.	.47	–
film grade, bulk, same basis ....lb.	.37	.47
Polyvinyl chloride, g.p. copolymer dispersion, same basis ......lb.	.58	.61
g.p. copolymer suspension, same basis ....lb.	.45	.49
Poppyseed, Dutch, bgs. ....lb.	.59	–
Turkey, bgs. ....lb.	.53	–
Potash agricultural (see Potassium muriate).		
Potash, caustic. liq., 45% basis, tanks, works. ....100 lbs.	13.00	–
West Coast, 50% basis, tanks, ex terminal ....100 lbs.	18.06	–
reg. flake, 88-92%, 400-lb. dms., c.l., works ....100 lbs.	42.35	–
Potassium acetate, NF, gran., dms., t.l., works E. ....lb.	.90	1.31
Potassium bicarbonate, tech., gran., bgs., c.l., works ....lb.	.31½	–
Potassium bicarbonate, USP, gran., dms., t.l. ....lb.	.72	–
Potassium bichromate, gran., 400-lb. dms., c.l., t.l., works. .....lb.	.48	–
Potassium bifluoride, tech., dms., t.l., works., frt. equald. ....lb.	.45	.49
Potassium bitartrate, NF, gran., powd., bgs. ....lb.	.90	1.20
Potassium borohydride, powd. dms., 100-1,000 lbs., works ....lb.	18.00	20.00
Potassium bromate, gran., powd., 200-lb. dms., c.l., f.o.b. works. ....lb.	1.06	–
Potassium bromide, NF., gran., dms., c.l. f.o.b. works ....lb.	1.12	–
Potassium carbonate, liq., 47% K_2CO_3, tanks, t.w., works... 100 lbs.	14.60	–
dms., c.l., t.l., works. ...... 100 lbs.	20.65	–
calcined, 99-100% K_2CO_3, hopper cars or trucks, works .... 100 lbs.	32.50	–
bgs., c.l., t.l., works..... 100 lbs.	35.20	–
drums. .... 100 lbs.	38.40	–
Potassium carbonate, gran., purif., 400-lb. dms., 5-dm. lots ...lb.	.40	.46
Potassium chlorate, cryst., dms., c.l., works ....lb.	.14½	–
powd., dms., c.l., works. ....lb.	.30	–
purif., gran., 325-lb. dms., f.o.b. shipping point ....lb.	.40	–
Potassium chloride, chemical grade, 99.95% KCl, bulk, c.l., f.o.b works. .... ton	105.00	–
USP cryst. dms. ....lb.	1.12	–
USP gran., dms. ....lb.	.67	–
USP powd., dms. ....lb.	.67	–
Potassium chloride, agricultural (see Potassium muriate).		
Potassium chromate, purif., cryst., dms., works. ....lb.	.57	–
Potassium citrate, NF, gran., 200-lb. dms., frt. alld. ....lb.	.93½	–
Potassium cyanide, dms., 20,000-lb. lots or more, f.o.b. works. . lb.	1.32	–
Potassium dichromate (see Potassium bichromate).		
Potassium fluoborate, tech., dms., c.l., t.l., works, frt. equald. .....lb.	1.40	1.42
Potassium fluoride, anhyd., dms., t.l., ...lb.	1.68	–
Potassium gluconate, dms., t.l., f.o.b. works. ....lb.	1.45	–
Price W. of Denver 4c. per lb. higher.		
Potassium guaiacolsulfonate, 300-lb. dms., 600 lbs. or more frt. equald. ....lb.	2.10	–
Potassium hydroxide, tech. (see Potash, caustic).		
Potassium hydroxide, USP, pellets, 100-lb. dms., c.l., t.l., works, frt. equald. ....lb.	1.29	1.31
Potassium iodide, USP, gran., cryst., dms., 1,000-lb. lots dlvd. ..lb.	10.72	12.39
ACS grade truckload ......lb.	11.32	13.55
Potassium-magnesium sulfate, std., bgs., works. .... ton	59.00	–
basis 40% K_2SO_4 and 55% $MgSO_4$ bulk, works ..... ton	67.00	–
Potassium metabisulfate, gran., dms. t.l. ....lb.	.44	–
Potassium muriate, 60-62.4% min. K_2O, std., bulk, c.l., frt. equald., f.o.b. Sask., Canada .... ton	44.00	45.00
soluble, fine std., f.o.b. Sask. .... ton	47.00	–
coarse, f.o.b. Sask. .... ton	49.00	50.00
gran., f.o.b. Sask. .... ton	50.50	51.50
Potassium nitrate. fert. grade, std., 50-ton c.l., dlvd. SE. .... ton	267.00	274.00
prilled .... ton	277.00	284.00
tech., gran., bgs., c.l., min. 50 tons, dlvd. .... ton	470.00	–
Potassium oxalate, neutral. tech., fine gran., powd., 300-lb. dm., frt. equald. ....lb.	2.54	–
Potassium pentaborate, gran., bgs., c.l., works. ....lb.	1.01	–
dms., same basis. ....lb.	1.06	–
Potassium pentaborate powder 15c. per lb. higher.		
Potassium perchlorate, dms. c.l., works. ....lb.	.78	–
Potassium permanganate, free flowing, bulk, hopper trucks, works. ....lb.	1.09	–
50-kg. dms., same basis. .....lb.	1.20	–
150-kg. dms., same basis. ....lb.	1.17	–
Potassium permanganate, USP, 50-lb. kgs., works, c.l., t.l. .....lb.	1.38	–
Potassium persulfate, 225-lb. dms., 24,000 lbs. or more, f.o.b. plant. .... cwt.	76.80	–
c/tl same basis .... cwt.	72.50	–
Potassium pyrophosphate tetrabasic, bgs., c.l., t.l., works, E., frt. equald. .... 100 lbs.	43.75	47.25
bulk, same basis .... 100 lbs.	46.00	49.50
Potassium salicylate, USP, gran., 200-lb. dms., 2,000 lbs. or more, works. frt. alld. ....lb.	1.52	–
USP, powd., 300-lb. dms., 2,000 lbs. or more, same basis .....lb.	1.42	–
Potassium silicate, soln., 29.8-30.2 Be., 2.5 ratio, t.c., t.t., works. .... 100 lbs.	18.90	–
dms., c.l., t.l., works. 100 lbs.	25.90	–
Potassium silicate, 40-40.5 Be., 2.1 ratio, t.c., t.l., works... 100 lbs.	25.05	–
40-40.5 Be., 2.1 ratio, dms., c.l., t.l., works. .... 100 lbs.	32.05	–
Potassium silicate, electronics grade, 30-30.4 Be., 2.1-2.2 ratio, t.c., t.t., works. .... 100 lbs.	26.10	–
dms., c.l., t.l., works. 100 lbs.	33.10	–
solid or glass, 2.15 ratio, dms., c.l., t.l., works. .... 100 lbs.	53.30	–
solid or glass, 2.5 ratio, dms, c.l., t.l., works.	45.65	–
"Ratio" indicates percentage by weight of SiO_2 divided by percentage by weight of K_2O.		
Potassium silicofluoride, bgs., c.l., t.l., frt. equald. ....lb.	.11½	.15
Potassium-sodium tartrate, NF, gran. or powd., dms., works ....lb.	.80	1.20
Potassium sorbate, t.l. dms., dlvd. ..lb.	2.20	3.10
Potassium stannate, dms., frt. alld. ..lb.	N.A.	
Potassium sulfate, agricultural grade, min. 50% K_2O std., bulk, c.l., works .... ton	150.00	160.00
Potassium sulfate, gran., purif. 400-lb. dm. ....lb.	.88	–
Potassium tetraborate, gran., bgs., c.l. works. ....lb.	1.10	–
dms, same basis. ....lb.	1.15	–
Potassium tetraborate powder 15c. per ton higher		
Potassium thiocyanate, USP, cryst., 225-lb. dms, 5-dm lots. ..lb.	4.01	–
tech., cryst., dms, t.l. ....lb.	.62	–
Potassium titanate, ctns., c.l., works ....lb.	.71¼	–
Potassium-titanium fluoride, tech., dms, t.l., works, frt. equald lb.	1.24	1.59
Potassium-zirconium fluoride, tech., dms., t.l., works, frt. equald ....lb.	.78	–
Prednisone USP, dms., 5 kilos or more ....gram	1.03	–
Prednisolone acetate, USP, dms., 5 kilos or more ....gram	1.12	–
Prednisolone, anhyd., USP, dms, 5 kilos or more ....gram	1.12	–
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld. ....lb.	4.95	6.75
Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alld. ....lb.	4.95	5.50
Propionaldehyde, tanks, f.o.b ....lb.	.35½	–
Propionic acid, syn., pure, tanks, dlvd. E. ....lb.	.33	.34½
n-Propyl acetate, tanks, dlvd. .....lb.	.53½	–
n-Propyl alcohol, tanks, dlvd. .....lb.	.42	.44
n-Propyl gallate dms., 100 to 2,000-lb. lots, dlvd. ....lb.	11.50	–
n-Propyl-p-hydroxybenzoate, USP, 500 kilos ....kilo	10.80	–
tech., 500 kilos. f.o.b. ....kilo	10.38	–
Propyl paraben (see n-Propyl-p-hydroxybenzoate)		
Propyl thiouracil, dms., 50-kilo lots or more ....kilo.	55.00	–
n-Propylamine, dms., c.l., dlvd. ....lb.	.75	.80
Propylene, polymer grade, f.o.b. Tex. and La. Gulf Coast points .lb.	.17¼	–
chemical grade same basis ...lb.	.15¾	.16
Propylene glycol, indust., tanks, f.o.b. lb.	.40	.41
USP, tanks, f.o.b. E. ....lb.	.43	.44
Propylene glycol monomethyl ether, tanks, dlvd. E. ....lb.	.49	–
Propylene oxide, tanks, f.o.b. works, frt. equald. ....lb.	.47½	–
Psyllium seed, USP powd bgs. .....lb.	1.60	1.75
Pumice, dom., fine, 4F-0, bgs., ton lots. .... ton	270.00	–
medium, 0½-1½, bgs, ton lots . ton	300.00	–
coarse, 2-extra coarse, bgs., ton lots. .... ton	300.00	–
Pumice, imp., Italian, fines, bgs, ton lots f.o.b. East Coast .... ton	280.00	–
medium, bgs., ton lots, f.o.b. East Coast .... ton	350.00	–
coarse, bgs., ton lots f.o.b East Coast .... ton	300.00	–
Pyrazolone red (red 38), dms., works. ....lb.	5.25	5.35
Pyrethrum flowers, fine grd. 0.9% pyrethrins, ton lots, frt. alld. lb.	1.91	–
Pyrethrum, purif., 20% pyrethrins, dms., works. ....lb.	37.50	37.75
Pyridine, refd., 2-deg., c.l., works dms., ...kilo	5.90	–
tanks ....kilo	5.70	–
Pyridoxine hydrochloride, USP, 100 kilos or more, dlvd. ....kilo.	29.00	33.00
Pyrites, Canadian 48-50% S. mines .... long ton	4.50	5.00
Pyrogallic acid (see Pyrogallol)		
Pyrogallol, 100-lb. dms., 1,000-lb., lots, dlvd. ....lb.	13.70	15.25

Q

Quassia chips ....lb.	.57	–
Quinacridone maroon, dms., frt. alld. ....lb.	20.75	24.25
red, dms., frt. alld. ....lb.	17.75	19.00
scarlet, dms., frt. alld. ....lb.	21.75	24.25
violet, dms., frt. alld. ....lb.	17.75	19.00
Quince seed, bgs. ....lb.	2.00	2.75
Quinidine sulfate, USP, 1,000-oz. dms., 2,000 oz. or more. . oz.	4.20	4.25
Quinine hydrochloride, NF, 1,000-oz. dms., 2,000 oz. or more. . oz.	2.45	2.60
Quinine sulfate, USP XVIII, 1,000-oz. dms., 2,000 oz. or more. . oz.	2.30	2.60
Quinoline, dms., t.l., frt. equald. ....lb.	1.49	–
tanks, same basis. ....lb.	1.43	–

R

R salt tech., 304 molecular wt. .....lb.	2.12	–
Racemethionine, USP, 50-250 kilos ....kilo	6.80	–
250-500 kilos ....kilo	6.60	–
500 or more kilos ....kilo	6.50	–
feed grade, 99% min., c.l., t.l. ...lb.	1.07	–
Rapeseed oil, dms. ....lb.	.58½	[illegible]
Rauwolfia serpentina root, powd. bls., dms. ....kilo.	22.00	
Red carmine. No. 40 (see Carmine No. 40)		
Red precipitate. (see Mercuric oxide, red).		
Reserpine, USP, cryst., bots., .. gram.	.40	[illegible]
Resorcinol tech., bgs., t.l., works. dlvd. ....kilo.	3.96	–
Resorcinol, USP, cryst., dms. 50 kilos or more, works. ....kilo.	9.35	–
powd. dms., same basis ......kilo.	9.90	–
Resorcinol monoacetate, dms., 1,000 lbs. or more. ....lb.	1.98	–
Rhodamine red toner, molybdated, PMA, dms., works. ....lb.	9.26	–
tungstated, PTMA, dms., f.o.b. works ....lb.	11.50	14.00
Rhodinol, 25-lb. cns. ....lb.	[illegible]	[illegible]
syn., dms. ....lb.	[illegible]	[illegible]
Rhubarb root, India, whole bgs. ...lb.	[illegible]	[illegible]
powd., bgs. ....lb.	[illegible]	[illegible]
Riboflavin, feed grade, 25 kilos, dlvd. ....kilo	[illegible]	[illegible]
Riboflavin 5-phosphate-sodium, 25 kilo lots ....kilo	[illegible]	[illegible]

S

[illegible]

CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

[illegible]

CHEMICAL PRICES

WEEK ENDING OCT 10, 1986

Sulfuric acid, virgin 100% tanks, works,		
East Coast ... ton	71.75	95.90
Gulf Coast ... ton	75.00	86.40
Midwest ... ton	80.25	-
Southeast ... ton	68.15	-
West Coast ... ton	85.00	-
NOTE: For prices on 60 and 66 Be., multiply by .7767 and .9319, respectively. For price of 20% fuming oleum, as is, add $3-$4 to above prices and multiply by 1.045.		
Sulfuric acid, smelter, 100% tanks, works,		
Gulf Coast ... ton	48.00	52.00
New Mexico ... ton	20.00	25.00
Southeast ... ton	63.15	-
93%, tanks, dlvd., Northwest ton	60.00	65.00
Sunflowerseed oil, crude, f.o.b. Minneapolis ... lb.	.14¾	.16½
Superphosphate, triple, 46% or more, s.p.a., run-of-pile, bulk, c.l., Fla. ... unit-ton	2.75	3.05
bulk, gran., c.l., Fla. ... ton	160.00	165.00

T

Talc, dom., grd. New York bgs., c.l., works ... ton	84.00	-
99.5%, 325 mesh, bgs., c.l., works ... ton	84.00	90.00
Talc, dom., 99.5%, 400 mesh, micronized, bgs., c.l., works.. ton	187.00	238.00
625 mesh, micronized, bgs., c.l., works ... ton	200.00	-
dom., ord., Calif. grd., bgs., c.l., works ... ton	90.00	-
ord., Vermont, off-color grd., bgs., c.l., works ... ton	136.00	-
imp., Canadian, grd., bgs., c.l., works ... ton	70.00	84.00
Tall oil, crude, Southeast, tanks, works, frt. equald. ... ton	90.00	100.00
Tall oil, refd., acid, same basis ... lb.	.31	-
dist., tanks, same basis ... lb.	.19	.23
Tall oil acids, 2% or more rosin, tanks, works, frt. equald. ... lb.	.20½	.23½
less than 2% rosin acid ... lb.	.22	.27
Tallow (see Oils, Fats & Waxes market report.)		
Tallow, fatty acids, tech., non-ref. dms., c.l., dlvd ... lb.	.37	.40
tanks, dlvd. ... lb.	.29	.45
hydrogenated, tech., flake, bgs., c.l., dlvd ... lb.	.37	.33
tanks, dlvd. ... lb.	.35	.42
Tangerine oil, Fla., dms. f.o.b. ... lb.	10.50	11.00
Italian, dms. ... kilo	52.90	-
Tankage, animal feeding, 9-11%, NH_3, New York, bulk ... unit-ton	5.50	-
Tankage, fert. grade (see Nitrogenous process tankage).		
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots ... lb.	6.09	-
tech., powd., dms. ... lb.	4.62	-
Tar acid oil, 15-18% t.l., dms., f.o.b works ... gal.	1.40	-
25-28%, t.l., dms., f.o.b. works. gal.	1.59	-
50-53%, t.l., dms., f.o.b. works. gal.	1.87	-
Tartaric acid, NF, bgs. ... lb.	1.20	1.50
Tellurium, metallurgical, f.o.b. works lb.	12.00	-
Terpin hydrate, NF, imp., cryst., powd., 38 kilo drums, f.o.b. ship. pt., frt. equald ... lb.	1.35	-
Terpineol ... lb.	1.10	1.50
Terpinyl acetate, extra, dms ... lb.	2.40	-
prime, dms. ... lb.	1.35	2.05
Terpinyl propionate, dms. ... lb.	4.50	-
Tetrachloroethylene, tech. (see Perchloroethylene).		
Tetrachloroethylene, USP, dms., c.l., t.l., works ... lb.	.30¼	-
Tetraethyl orthosilicate, bulk, f.o.b. works ... lb.	1.53	1.66
Tetraethylene glycol, tanks, frt. alld. lb.	.67	-
Tetraethylene glycol diacrylate, t.l. dms., f.o.b. works ... lb.	1.50	-
Tetraethylenepentamine, tanks, same basis ... lb.	1.70	1.75
Tetraethylthiuram disulfide, tech., flake, dms., t.l., frt. alld ... lb.	.68	2.07
Tetrahydrofuran dms., c.l., t.l., f.o.b. works ... lb.	1.02	-
tanks, same basis ... lb.	.96	-
Tetrahydrofurfuryl alcohol tanks, f.o.b. Memphis, Tenn. ... lb.	.90	-
Tetrahydrolinalool, syn., dms. ... lb.	7.20	-
Tetrahydrophthalic anhydride dms., c.l., t.l. f.o.b. works ... lb.	.65	-
Tetrapotassium phosphate (see Potassium phosphate, tetrabasic).		
Tetrasodium pyrophosphate (see Sodium pyrophosphate, tetrabasic.)		
Thallium metal, dlvd. ... lb.	35.00	-
Thallium sulfate, 99%, bots., dlvd. kilo	140.00	-
Theobromine, bulk f.o.b. works ... lb.	4.00	4.50
Theophylline, USP, anhyd. 50-kilo dms., 10,000-kilo lots ... kilo	12.00	12.95
Thiamine hydrochloride, USP 100-kilo dms., dlvd. ... kilo.	27.00	31.00
Thiamine mononitrate, USP, 100-kilo., dms., dlvd. ... kilo.	27.00	31.00
Thiodiphenol, 98%, dms., f.o.b. works ... lb.	3.35	-
Thioflavin green toners, molybdated, PMA, dms. ... lb.	5.40	6.05
tungstated, PTA, dms. ... lb.	5.60	5.85
Thioglycolic acid, refd., dms., ton lots 100% acid basis ... lb.	2.07	-
Thioindigoid maroon, dms., frt. alld. lb.	7.50	-
rods, dms., frt. alld ... lb.	5.88	6.12
Thionyl chloride, high-purity, 99.6%, 24,000-lb. min. t.l., dms. frt. equald ... lb.	.55	-
Thorium nitrate, purif., dms., 100-lb. lots or more, works ... lb.	2.75	-
dl-Threonine, dms 10 kilos wks ... kilo.	128.00	-
Thyme leaves, French, bgs. ... lb.	1.45	-
Spanish, bgs ... lb.	.75	-
Thyme oil, NF, red, dms. ... kilo	20.00	-
NF, white, dms. ... kilo	22.00	-
Thymol, NF ... lb.	3.75	6.15
Thymol iodide, dms., 100-lbs. f.o.b. works ... lb.	52.30	56.20
Tin metal (NY composite) ... lb.	N.A.	-
Titanium dioxide, anatase, bgs., 20-ton lots, frt. alld. ... lb.	.77	.79
slurry shipments, 50-ton lots, dry basis, frt. alld ... lb.	.78	-
Titanium dioxide, rutile, reg., bgs., 20-ton lots, frt. alld. ... lb.	.81	.84
slurry shipments, 50 ton lots, dry basis, frt. alld ... lb.	.84	-
Non-chalking rutile material costs 1c. per pound more.		
Titanium hydride powd. electronics grade, dms. ... lb.	26.50	-
Titanium tetrachloride, tech., bulk, c.l., f.o.b. works ... lb.	.30	.35
200-gal cylinders c.l, same basis lb.	.50	-
Titanium sponge, 99.3%, fiber drums, less than 5,000 lbs. f.o.b. wks ... lb.	4.85	-
Tobias acid, 2,000 lbs. or more ... lb.	2.45	-
d-a-Tocopherols, 87%, dms ... kilo	50.08	-
d-a-Tocopheryl acetate, 81% conc., dms ... kilo	57.49	-
d-a-Tocopheryl acid succinate, cryst., dms ... kilo	78.44	-
dl-a-Tocopherol, dms. ... kilo.	27.40	-
dl-a-Tocopheryl acetate, USP 50-kilo dm. 1000 kilo min. ... kilo.	16.00	18.50
50% dry powd., 50-kilo dm. ... kilo	17.00	-
Tolu balsam, cns. ... lb.	7.60	8.68
Toluene, petroleum, ind. or nitration, tanks		
Atlanta, Ga., dlvd. ... gal.	.70	-
Bayonne, N.J., dlvd ... gal.	.70	-
Baytown, Tex., f.o.b. ... gal.	.70	-
Chicago, Ill. dlvd. ... gal.	.70	-
Clairton, Pa., f.o.b. ... gal.	.70	-
Deer Park, Tex., f.o.b. ... gal.	.70	-
Ft. Wayne, Ind., dlvd. ... gal.	.70	-
Gulf Coast, spot, barges ... gal.	.65	.67
Houston, Tex., dlvd. ... gal.	.70	-
New Jersey Metro, dlvd ... gal.	.70	-
Philadelphia, Pa., dlvd. ... gal.	.70	-
Providence, R.I., dlvd. ... gal.	.70	-
Toluene di-isocyanate (mixed isomers), 80% 2,4- and 20% 2,6-isomers, jumbo tankcars, dlvd. ... lb.	1.01	-
p-Toluenesulfonamide, powd., dms., t.l., works ... lb.	3.55	-
m-Toluidine, tech., bulk ... lb.	3.10	-
o-Toluidine, tech., liq., dms. c.l. ... lb.	.72	.75
bulk, same basis ... lb.	.60	.64
p-Toluidine, tech. cast solid, dms., cl., works ... lb.	1.80	1.85
Liq., tanks, same basis ... lb.	1.70	-
flake, same basis ... lb.	1.95	-
Toluidines, mixed, o-m-p, tech., liquid, c.l. f.o.b. works ... lb.	1.03	-
bulk same basis ... lb.	.95	-
Tolyltriazole, dms., 1,000-lb. lots, f.o.b. Cincinnati, Ohio ... lb.	2.90	-
Tonka beans, Angostura, prime, 1,000-lb. lots ... lb.	6.50	-
Toxaphene, dms., c.l., t.l., works ... lb.	.38	-
Tragacanth gum, No. 1, ribbons, cns. lb.	36.00	40.00
flaked powder ... lb.	12.50	15.00
Triacetin tanks, dlvd. E ... lb.	.75	-
Tributyl citrate, t.l., drums, f.o.b., works ... lb.	1.70	-
Tributyl phosphate, tanks, works ... lb.	1.66	1.77
Tributylamine, dms., c.l., dlvd. ... lb.	1.39	-
tanks, same basis ... lb.	1.33	-
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b., works ... lb.	.94	-
USP, 100-lb. dms., frt. equald. ... lb.	.99½	-
1,2,4-Trichlorobenzene, pure, tanks, dlvd. ... lb.	.61½	-
1,1,1-Trichloroethane, tanks, consumers, dlvd. ... lb.	.40½	
1,1,2-Trichloroethane, tanks, f.o.b. works ... lb.	.42	-
Trichloroethylene, tanks, dlvd. ... lb.	.38½	-
Trichloroisocyanuric acid, dms. ... lb.	1.25	-
Trichlorophenoxyacetic acid (see 2,4,5-T).		
Tricholine citrate, 65%, soln., non-ret. dms., 1,500-lb. lots, dlvd. ... lb.	1.35	-
Tricresyl phosphate, tanks, f.o.b. works ... lb.	1.60	1.76
Tridecyl alcohol, mixed isomers, tanks, dlvd. ... lb.	.57	-
Triethanolamine, 85%, tanks, dlvd. E. lb.	.45	.48
99%, tanks, same basis ... lb.	.45	.48
Triethanolamine lauryl sulfate, tanks, f.o.b. works ... lb.	.27¼	.27½
Triethylamine, dms., c.l., dlvd. ... lb.	1.33	-
tanks, same basis ... lb.	1.20	-
Triethyl citrate, t.l., drums, f.o.b., works ... lb.	1.82	-
Triethyl phosphate, tanks, dlvd. ... lb.	1.15	-
Triethylene glycol, tanks, f.o.b. Gulf lb.	.47	-
Triethylene glycol dipelargonate, tanks f.o.b. works ... lb.	.29½	-
40-60% tanks, 100% basis, frt. equald ... lb.	.35	-
Triethylenetetramine tanks, frt. equald. lb.	1.43	1.45
Tri-iso-tolyl trimellitate, f.o.b. works lb.	.51	.55
Tri-isobutylene, tanks, dlvd. ... lb.	.45	-
Tri-isopropanolamine, dms., c.l., frt. alld. E. ... lb.	.57½	-
Trimethylamine, anhyd., tanks, frt. equald., 100% ... lb.	.54½	-
25% soln., tanks, frt. equald., 100% basis ... lb.	.63½	-
40% soln., tanks, frt. equald., 100% basis ... lb.	.56½	.57
Trimethylolpropane bgs c.l. t.l. dlvd. lb.	.73	-
Trimethylolpropane triacrylate, t.l. dms., f.o.b. works ... lb.	1.50	-
Tripentaerythritol, tanks, frt. alld., E, lb.	1.00	-
Triphenyl phosphate, dms., t.l., frt. equald ... lb.	1.64	.78
Tripropylene glycol tanks, frt. alld. E ... lb.	.64	-
Tris-(hydromethyl) nitromethane, solid, t.l. works ... lb.	.605	-
Trisodium phosphate (see Sodium phosphate, tribasic)		
l-Tryptophan, dms, 25-kilo lots ... kilo	62.00	65.00
Tung oil, tanks, imp. New York ... lb.	.32	.34
Tungstic acid 92½%, dms., 1,750-6,000 lbs., works ... lb.	12.85	-
Turmeric, Alleppey 5% ... lb.	.65	-
Turmeric, Alleppey over 6% ... lb.	.70	-
Turpentine, crude sulfate tanks, f.o.b. Southeast works ... gal.	.70	.80

U

Ultramarine blue pigments, 550-2,000 lb.-lots, works ... lb.	1.30	-
violet, same basis ... lb.	2.20	-
Umber pigment, burnt, American, frt. equald ... lb.	.13½	.15½
raw, American, dom., bgs., l.c.l., same basis ... lb.	.13½	.14¾
Undecylenic acid, dms., works ... lb.	2.70	-
Urea, 46% N, ind., bulk, 50-ton c.l., dlvd. ... ton	200.00	220.00
46% N, agricultural, bulk, dlvd. Midwest ... ton	200.00	215.00
46% N, agricultural, bulk, dlvd. West ton	210.00	-
Uva-Ursi leaves, bls. ... lb.	.22	-

V

Valerian root, Belgian, bgs. ... lb.	.65	.85
Indian, bgs. ... lb.	.45	-
Vanadium oxytrichloride, 3,000 lb. cyls., works ... lb.	5.40	-
Vanadium pentoxide, tech., gran., per lb. of V_2O_5, 550-lb. dms., works ... lb.	4.10	4.94
fused or flake, per lb. V_2O_5, 550-lb. dms., works ... lb.	3.35	3.65
Vandyke brown, bags., t.l., frt. equald. lb.	.27¼	-
Vanilla beans, Madagascar ... lb.	37.00	-
Java, tins ... lb.	27.00	30.00
Vanillin, USP, dms., f.o.b works ... lb.	6.25	-
Imp., dms. ... lb.	4.75	5.00
Versinol Ag ... lb.	.64	-
Vetiveryl acetate, dms. ... kilo	60.50	-
extra ... lb.	63.00	-
Vetiver oil, Bourbon, dms. ... lb.	16.00	17.00
Haitian ... lb.	26.50	-
Java ... kilo	31.00	-
Victoria blue toners, molybdated, PMA dms. ... lb.	6.20	6.30
tungstated, PTA, dms. ... lb.	10.40	-
Vinyl acetate monomer, tanks, dlvd. lb.	.39	-
Vinyl chloride monomer, polymer grade, tanks, f.o.b. works ... lb.	.28	-
Vinyl ether, USP, anesthesia, 75-cc. bots., hospitals ... bots.	1.56	-
2-Vinylpyridine t.l., dms. works ... kilo.	7.81	-
tanks, works ... kilo.	7.61	-
Vinyltoluene, bulk, f.o.b. ... lb.	.67	.73½
Vitamin A, synthetic, dry, pharm., 500,000 A units per gm., 50-kilo. lots ... kilo	33.00	-
Vitamin A, liq. in oil, pharm., 1,000,000 A units per gram, 10 kilo lots ... kilo	41.00	-
Vitamin A, feed grade, 650,000 units per gm. ... kilo.	18.70	23.85
Vitamin B_1 (see Thiamine hydrochloride).		
Vitamin B_2 (see Riboflavin and Yeast).		
Vitamin B_{12}, cryst., non-sterile, USP (cyanocobalamin), vials, 50-gram, lots ... gram	8.00	9.75
Vitamin B_{12} 1% trituration of cryst. B_{12} (cyanocobalamin USP) with dicalcium phosphate, 25-kilo dms. kilo.	10.75	12.75
Vitamin B_{12}, 0.1% trituration of cryst. B_{12} (cyanocobalamin USP) with mannitol, 25-kilo. dms. ... kilo.	15.80	-
Vitamin B_{12}, cobalamin concentrate NF with mannitol. 1,000 mcg. per gram, dms, ... per gram activity	19.45	-
Vitamin B_{12}, 1% Vitamin B_{12}, USP, absorbed on resin, 5-kilo dms., 500-gram lots, frt. alld. per gram activity	15.65	-
Vitamin B_{12}, 1% cobalamin concentrate, NF, absorbed on resin, 5-kilo dms., frt. alld. per gram activity ...	15.40	-
Vitamin B_{12}, 1% cyanocobalamin in gelatin, 2.5-kilo dms., frt. alld ... per gram activity	15.40	-
Vitamin C (see Ascorbic acid).		
Vitamin D (see Cholecalciferol)		
Vitamin D_2 (see Codliver and Fishliver oils).		
Vitamin E (see a-Tocopherol and Wheat germ oil).		
Vitamin H (see Biotin).		
Violet methyl toner (see Methyl violet toner)		

W

Warfarin 0.5%, dms., ton lots, frt. alld. New York or Chicago ... lb.	.75	-
Wheat germ oil, cold-pressed ... gal.	16.50	17.50
cold-processed ... gal.	14.00	-
White precipitate, USP, powd., 100-lb. dms., f.o.b. works ... lb.	7.892	11.24
Whiting (see Calcium carbonate).		
Wintergreen oil, syn. (see Methyl salicylate).		
Witch hazel bark, bls. ... lb.	1.35	-
leaves, bls ... lb.	1.75	-
400 mesh, bgs., c.l. works ... ton	134.00	-
325 mesh, bgs., c.l. works ... ton	117.00	-
high aspect ratio, bgs., works ton	164.00	-
Wollastonite, t.l., f.o.b., producing plant. general grade ... ton	200.00	-
325 mesh ... ton	140.00	141.00
400 mesh ... ton	160.00	-
1250 mesh ... ton	500.00	-
Wool grease, USP (see Lanolin).		
Wormseed oil (see Chenopodium oil, NF)		
Wormwood oil, cns. ... lb.	31.00	36.00

X

Xanthan gum, food 300-lb. dms., f.o.b. works ... lb.	5.85	6.20
ind., grade, same basis ... lb.	4.84	-
Xylene, petroleum, ind or nitration, tanks		
Alliance, La., f.o.b ... gal.	.80	-
Atlanta, Ga., dlvd. ... gal.	.80	-
Bayonne, N.J., dlvd ... gal.	.80	-
Bayonne, N.J. f.o.b. ... gal.	.80	-
Baytown, Tex., f.o.b ... gal.	.80	-
Chicago, Ill., dlvd ... gal.	.80	-
Clairton, Pa. ... gal.	.80	-
Ft. Wayne, Ind., dlvd. ... gal.	.80	-
Gulf Coast, spot, barges ... gal.	.75	.77
Houston, Tex., dlvd. ... gal.	.80	-
New Jersey Metro, dlvd ... gal.	.80	-
Xylene, petroleum, ind or nitration, tanks		
Philadelphia, Pa., dlvd ... gal.	1.38	-
Providence, R.I., dlvd. ... gal.	1.42	-
South Bend, Ind., dlvd ... gal.	1.37	-
m-Xylene, high purity, tanks, f.o.b. Texas City, Tex. ... lb.	.38	-
o-Xylene, tanks, works ... lb.	.128	.145
p-Xylene, tanks, dlvd ... lb.	.185	-
m-Xylenediamine, dms., t.l., f.o.b. works ... lb.	1.70	-
2,4-Xylidine, tech., liq., c.l., t.l. f.o.b. works ... lb.	1.60	-
Xylidines, mixed, o-m-p, dms., c.l., t.l., f.o.b works ... lb.	1.00	-

Y

Yara yara, 25-lb cns ... lb.	2.81	-
Yeast, pure brewer's debittered, NF, Saccharomyces, t.l., f.o.b works ... lb.	1.10	-
Yerba, santa leaves, bls ... lb	2.40	-
extra, bots. ... lb.	28.50	31.35
Ylang-ylang oil, extra grade ... lb.	23.93	-
grade 1 ... lb.	19.09	-
grade 2 ... lb	15.90	-
grade 3 ... lb	13.04	-

Z

Zein, bgs., 2,000 lb lots ... lb.	7.50	9.30
Zinc acetate, NF, dms. ... lb.	1.00	1.70
tech., dihydrate, bgs., t.l., works lb.	1.60	-
Zinc borate, tech., 43% ZnO, 37% B_2O_3, 50-lb bgs., 20,000-lb. t.l., f.o.b. works ... lb.	.55	-
cryst., 37% ZnO, 49% B_2O_3, 250-lb. dms. 20,000 lbs t.l. f.o.b wks lb.	.89	-
Zinc chloride, USP, gran., dms. ... kilo	9.79	-
Zinc chloride, tech., soln 50%, tanks, f.o.b. Cleveland, Ohio ... 100 lbs.	20.20	-
Concord, N.C. ... 100 lbs.	20.20	-
Freeport, Tex ... 100 lbs.	20.20	-
Old Bridge, N.J ... 100 lbs.	20.20	-
65 degree, same basis Cleveland, Ohio ... 100 lbs.	27.90	-
Concord, N.C. ... 100 lbs.	27.90	-
Old Bridge, N.J. ... 100 lbs.	27.90	-
70 degree, same basis Cleveland, Ohio ... 100 lbs.	29.70	-
Concord, NC ... 100 lbs.	29.70	-
Old Bridge, NJ ... 100 lbs.	29.70	-
72 degree, same basis Cleveland, Ohio ... 100 lbs.	33.20	-
Concord, NC ... 100 lbs.	33.20	-
Old Bridge, NJ ... 100 lbs.	33.20	-
Zinc chromate, bgs., dlvd. ... lb.	1.12	[illegible]
Zinc cyanide, dms., c.l. ... lb.	1.65	2.11
Zinc dust pigment type 1 & 2, dms., c.l., f.o.b. plant ... lb.	.59	[illegible]
Zinc ethylenediamine tetracetic acid, 8.4% Zn., ammonia salt soln., t.c., t.t., f.o.b. works ... lb.	.56	-
9% Zn., ammonia salt soln., t.c., t.t., f.o.b. works ... lb.	.48	-
Zinc fluoborate, liq. conc., dms., t.l., works, frt. equald. ... lb.	.66	-
Zinc metal, high grade, dlvd. ... lb.	.44	-
Zinc naphthenate, liq. 8% Zn, dms., dlvd ... lb.	.95	[illegible]
Zinc nitrate, tech., flake 300-lb. dms. ... lb.	.34	
Zinc oxide photo conductive, bgs., c.l., frt. alld. ... lb.	.47¾	[illegible]
Zinc oxide, USP 50-lb. bxs., c.l., frt. alld. ... lb.	.46½	[illegible]
Zinc oxide pigment, American process, lead-free bgs., c.l., frt. alld. ... lb.	.40	[illegible]
Zinc oxide pigment, French process regular, bgs., c.l., frt. alld. ... lb.	.41	[illegible]
Zinc phenolsulfonate, purif., gran., 250-lb. dms., t.l., frt. alld. ... lb.	1.82	-
Zinc pyridinethione, 48% dispersion, dms., f.o.b. works ... lb.	8.50	[illegible]
Industrial grade ...	14.50	-
Zinc resinate precip. 7.2-7.6% Zn., dms., frt. alld. ... lb.	.45	-
Zinc silicofluoride, dms., c.l., t.l., works ... lb.	.17	[illegible]
Zinc stearate, USP, bulk, t.l. ... lb.	.92	1.4
Zinc sulfate, gran., monohydrate, indust. grade 36% Zn., bgs., c.l., works ... 100 lbs.	26.60	[illegible]
agricultural grade powd., bulk, same basis ... 100 lbs.	22.50	-
Zinc yellow (see Zinc chromate).		
Zinc-ammonium chloride, bgs., c.l., works ... lb.	.42	-
Zinc undecylenate, dms., works ... lb.	4.57	4.70
Zinc-formaldehyde sulfoxylate, basic 200-lb. dms., frt. alld. ... lb.	1.05	-
Zircon gran. bgs., bulk c.l., works. ton	166.00	[illegible]
Zircon milled bgs., 200 and 325 mesh, c.l., works ... ton	226.00	-
Zirconium acetate soln., 25% ZrO_2, dms., c.l., 30,000 lbs. min., works ... lb.	[illegible]	-
22% ZrO_2, same basis ... lb.	[illegible]	-
Zirconium hydride, powd., electronic grade, dms., works ... lb.	[illegible]	-
Zirconium oxide, powd., coml., dms., 2,000 lbs. min. ... lb.	[illegible]	-
electronic, same basis ... lb.	[illegible]	-
insulating, stabilized, 325°F same basis ... lb.	[illegible]	-
insulating, unstabilized, 325°F same basis ... lb.	[illegible]	-
dense, stabilized, 30F, same basis ... lb.	[illegible]	-
Zirconium oxychloride, liq., ctns. 5-ton lots, works ... lb.	[illegible]	-

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INGERSOLL RAND XLE-15 ¾-10x7, 125 HP, 70 PSIG

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PFAUDLER G/L, 70 CU. FT.
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316SS ROTARY VACUUM DRYER SYSTEMS: (3) 142, (1) 120 CU. FT.
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11 SS JKT. AGIT. KETTLES FROM 750 GAL. TO 5,000 GAL.

(1) 3,000, (7) 2,000, (22) 1,000 (8) 500, (2) 300, (1) 200, (1) 130, (4) 100, (4) 50, (1) 30 GALLON
ALL REACTORS EQUIPPED WITH TW DRIVES, MECHANICAL SEALS MANY WITH VARIABLE SPEED DRIVES, GLASS RECEIVERS & GRAPHITE HEAT EXCHANGER

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(1) 4,000, (1) 3,000, (3) 2200, (6) 2000, (1) 1,300, (2) 1,250, (9) 1,100, (7) 1,000, (7) 500, (2) 300, (1) 30, (1) 10 GALLON

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SMITH MOLECULAR ROTA-FILM MDL, 700-12-P, SKID MOUNTED SOLVENT RECOVERY SYSTEM
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750 GAL. 304 SS READCO MIXER
SHARPLES SS MODEL P-3400 CENTRIFUGE UNUSED (4)
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4,200 GAL. HAST C REACTOR 125 FV/175
UNUSED 1900 SQ. FT. HAST C HEAT EXCHANGER

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(1) 5,000, (1) 4,000 (1) 3,000, (8) 2,000 (3) 1,500, (4) 1,000, (1) 800, (7) 500, (1) 300, (3) 250, (5) 200, (1) 150, (3) 100, (3) 50 GALLON

TANK FARMS

GLASS LINED: (2) 10,000, (1) 5,000, (2) 2,000 GALLON
STAINLESS STEEL 316SS & 316LSS: (10) 10,000, (1) 8,000 (3) 7,500, (2) 6,000, (3) 5,000 (3) 4,000 GALLON
KYNAR LINED: 30,000 GALLON
HERESITE LINED: (1) 10,000 GALLON
LITHCOTE: (1) 10,000 GALLON
RUBBER LINED: (3) 10,000 GALLON
FRP: (1) 12,000 GALLON
STEEL: (1) 15,000 (1) 8,000, (2) 6,000, (7) 1,000 GALLON

IF YOU ARE BUILDING A NEW CHEMICAL PLANT OR EXPANDING A PROCESS YOU MUST VISIT THIS LIQUIDATION SITE

ALABAMA PLANT LIQUIDATION

(4) 290 CU. FT SS ROT. VAC DRYER SYSTEMS
10'x 14' EIMCO ROT. VAC. FILTER
(1) LATE MODEL H9 VAC. PUMP W/FULLER V660 VAC. BOOSTER PUMP
REACTORS: 15,000 GAL 316 L SS AGIT. 10'6x 23'
4,000 GAL. G/L BODY, 100FV/150FV JKT
(4) 3,300 GAL. SS 60/30 HP AGIT. 110 PSI INT. W/COILS
(1) 3,300 GAL. SS 30 HP, 6TW, 300 PSI INT. W/COILS
(2) 2,000 GAL. L SS, 75/200 PSI JKT
TANKS: 6,000 GAL., 4,000 GAL. MONEL V (4)
4,700 GAL. G/L PFAUDLER CHEMSTORE 30 PSI
SS HEAT EXCHANGERS FROM 100 TO 500 SQ. FT.
MANY MISC ITEMS

CORN SYRUP/STARCH PLANT

200,000, 150,000, 50,000 LBS /HR PACKAGE BOILERS
6'x 50' 304 SS 5'x 30' CS ROT. HOT AIR DRYER
4'x 31', 72 TUBE SS ROT STEAM DRYER
24,000 SQ. FT.TRIPLE EFFECT EVAP. TI TUBES
600 SQ. FT U. S. AUTOJET FILTER CEILCOTE LND (3)
500 SQ. FT. HERCULES 316 ELC PR/LF FILTERS (4)
12'x 15' EIMCO BELT CS ROT. VAC. FILTER (2)
8'x10', 7'6"x16' EIMCO 316 SS PRECOAT FILTER (4)
500,265 SQ FT. 316 SS PLATE HT. EXCHS.
DUCON SS WET SCRUBBER 11500 CFM
9,000' 6,500, 5,500, 3000 GAL. SS AGIT. MIX TANK (16)
7,000 GAL. 316 SS CONE BOTM. TANK 10'8"x 9'6"
3000 GAL 316 VAC.TANK15 PSI/FV
EQUIPMENT MUST BE MOVED IMMEDIATELY

SYNTHETIC GAS PLANT

250,000,000 CU. FT./DAY
COMPRISED OF TWO TRAINS ON 60 ACRES OF LAND
WE WILL SELL ENTIRE FACILITY OR INDIVIDUAL PIECES OF EQUIPMENT

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AND
FOR SETTING UP AN IMMEDIATE INSPECTION
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PLEASE CALL RALPH CARTER FOR FURTHER INFORMATION AT 609-443-4545

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WE ARE EXPERTS AT DISMANTLING, REERECTION, RIGGING DEMOLITION AND ASBESTOS REMOVAL WITH TERRIFIC REFERENCES BOTH NATIONALLY AND INTERNATIONALLY
CALL US TODAY FOR A QUOTATION ON YOUR CURRENT NEEDS OR ADD US TO YOUR BIDDERS LIST FOR ANY FUTURE PROJECT (201) 390-9550

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LIQUIDATION OF 160 M.M. LB./YR. SODIUM TRIPOLYPHOSPHATE, PLANT-KEARNY, N.J.

(1) 12' dia x 70' Rotary Dryer, SS constr., 125 H.P.
(1) 8'6" dia x 46'6" Bartlett Snow Rotary dryer, 316 SS, 100 HP
(1) 8' dia x 50' Louisville Steamtube Rotary dryer SS clad, 40 HP
(1) 11'6" x 70' Long Bartlett Snow Calciner, 316 SS, 1100 degrees C, complete
(1) 12' dia C.E. Raymond Seperator, Singular whizzer
(2) Roto-Clone Type N Wet Scrubbers SS constr.
(1) 10,000 gal. Mix tank, SS constr. 13' dia x 10', 30 HP
(2) 10,000 gal. Mix tanks w/int. coils, 13' dia x 10', 30 HP
(1) 43,000 gal. Storage tank, 304 SS, 9½' dia. x 8'
(1) 34,000 gal. Jkt. tank, SS constr. 150 psi jkt.
(1) 26,000 Storage Tank, SS constr., 7' dia. x 9'.
(1) Butler Building

Large quantity Silos Many Screw Conveyers Available
Various Sizes, C.S. & SS Construction Buy Direct from Plant site And Save
Call For Complete Details

EQUIPMENT WANTED

GOOD, USED, CHEMICAL, PHARMACEUTICAL & RELATED EQUIPMENT - CENTRIFUGES, DRYERS, FILTERS, REACTORS, TANKS ETC.
WE WILL PURCHASE INDIVIDUAL ITEMS OR COMPLETE PLANTS.
CALL OUR OFFICE TODAY. TOP DOLLARS PAID. NO DEAL TOO BIG OR TOO SMALL.

DRYERS

Drum Dryers/Flakers

(1) 24" dia. x 36" Buflovac SS dble. drum dryer
(2) 32" dia.x 108" Blaw Knox CI dble. drum dryer
(1) 32" dia. x 17'6" Sandvik SS belt flaker
(1) 36" dia.x 10' Buflovak CI dble. drum dryer
(3) 42" dia.x120" Blaw Knox CI dble. drum dryer
(1) 48" dia.x 28" drum flaker, chrome plated drum
(1) 48" dia.x 40" CI flaker, mfg. by Buffalo Foundery
(1) 48" dia.x 40 drum flaker, nickel plated drum, mfg. Blaw-Knox

Fluid Bed

(1) 60 Kg. Aeromatic, Batch, 6'x9', 56,000
(1) 100 Kg. Aeromatic Model ST 100, sanitary SS
(1) Fitzpatrick Model FA 250, SS, 20 HP XP

Holoflite

(1) Western Precipitation Model P80SSO-A, twin screw, 12" dia. x 20' long, SS constr., jckt. rated 15 psi, complete with 7.5 HP vari-speed drive.
(1) New/Never-Used Joy Processor, CS, single screw, 16"x16' long, rated 110 psi @ 340° F., sprocket & chain drive by 1.5 HP varispeed drive.

Rotary Vacuum

(1) 200 Cu. Ft. Stokes, SS constr., compit.
(2) 165 Cu. Ft. Pfaudler, Double Cone, G/L, 30 &FV/50 psi jktd., 15 HP vari-drive
(1) 150 Cu. Ft. Blaw Knox, Nickel
(2) 132 Cu. Ft. Stokes, Nickel
(1) 72 Cu. Ft. Blaw Knox, SS
(1) 60 Cu. Ft. Titanium Double Cone
(1) 50 Cu. Ft. Gemco, 316SS sanitary, double cone
(1) 37.8 Sq. Ft. Horiz. Thin Film, vac. int. & 150 psig. 304/316SS
(1) 37 Cu. Ft. Gemco, SS
(1) 30 Cu. Ft. P-K Twin Shell, 304SS
(1) 20 Cu. Ft. Abbe Twin Cone, 304SS

Spray

(1) 30"x3' Bowen Laboratory w/3' cone bottom, SS constr., w/centrifugal atomizer, 3 HP blower & motor.(1)
(1) Niro lab size 32"diax2'w/2'cone w/centrif. atomizer SS contacts
(1) 18' dia. Bowen compit. system SS contacts, new 1976

CENTRIFUGES

(1) Delaval BRPX 309, SS, 20HP
(1) Unused Model B-10 Podbielniak, Alloy 20
(1) Sharples AS-26, SS
(2) Sharples AS-16P, 316SS
(1) Alfa-Laval SS Decantor, Horiz., Mdl. NX314
(2) Dorr Oliver Mdl. CH30 CSU "Merco," 316SS contacts, 150 HP
(1) Baker Perkins S-82 "Pusher Type," SS, 50 HP
(1) Bird 18" x 28", 316 ELC, contour bowl.
(2) Bird 24"x38", 316SS, 40 HP
(3) Sharples P-3000, 316SS, 30 HP
(1) Sharples P-1000, SS 20HP
(1) Unused Bird 36 x96, 317L SS
(1) Tolhurst 48" x 24" perf. basket, 316SS sanitary, auto. plow & discharge, rated 85 #/cu. ft. @ 900 RPM, 20 HP XP.
(1) Tolhurst 48" x 24" Batchmaster, 316SS, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Tolhurst 48"x24" Batchmaster, rubber lined, perf. basket, w/hydr. plow & 20HP hydr. drive
(2) Tolhurst 48" x 24" Batchmaster, Heresite lined, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Western states 48"x 24", 316 SS
(1) Fletcher 48"x 28" Suspended type, SS perf. basket, 20/10 HP
(1) Sharples Tornado 48" x 30", 316SS, perf. basket, 40 HP XP
(1) Alfa Laval Model MAPX 210 T24, SS wetted parts
(2) Sharples C-27, 316 SS, wetted parts, 40 HP
(1) Sharples C-20, Super-D-Hydrator, SS, 30 HP
(1) Dorr Oliver Mercone Screener Model C-400 X2, all SS, twin screw disch., 10 HP

PARTIAL LISTING ONLY

EVAPORATORS

(1) 1 Sq. Ft. Artisian "Kontro" Ajust-O-Film sys., 316SS
(1) 1.4 Sq. Ft. Luwa Wiped Film, 316SS, 1.5 HP
(1) 1.4 sq. Ft. Luwa thin film SS
(1) 2.5 Sq. Ft. Rodney Hunt Turbo Film 347 SS
(1) 5.4 sq. Ft. Luwa filmtruder, 316 LSS
(1) 6.54 Sq. Ft. Votator Evaporator System,316 SS contracts, 15 psi & FV & int., 150 psi jkt.
(1) 8.7 Sq. Ft. Rodney Hunt Turbo-Film, 304 SS contact parts, 15 psi & FV/150 psi jckt.
(1) 10.8 Sq. Ft. Luwa SS Wiped Film Evap. System, 15/550 psi
(1) 19.5 Sq. Ft. Votator Turba Film, 304 Sanit SS FV/150 psi 10HP
(1) 20 Sq Ft. Kontro Horiz. Adjust-O-Film, 316ELC, 50 psig, 15 HP
(1) Approx 31 Sq. ft. Vert., Turbo-Film Processor, 304 SS Contacts
(1) Like New 37.8 Sq. Ft. Luwa Horiz. Thin-Film Dryer, 304/316L SS
(1) 40 Sq. Ft Kontro Adjust-O-Film, SS constr., 20 HP
(1) 47 Sq. Ft. Artisan rising Film, Hast "C"
(1) Approx 51 sq. ft. Pfaudler Wiped film, 316 SS, 100/85 & FV
(1) 80 Sq. Ft. Kontro Wiped Film Syst., SS constr., FV/150 psi, 40 HP
(1) UNUSED 86 sq. ft. Luwa thin film dryer horiz. 316 L wetted parts, FV int., 150 psi sat steam jkt.
(1) 141 Sq. Ft. Rodney Hunt Turbo-Film, 316 SS 15 psi int., 35 psi jkt 40 HP XP

BLENDERS

800 Cu. Ft. Jktd. Dbl.Rbn., CS
Approx. 480 Cu. Ft. CS, 75HP
UNUSED 460 Cu. Ft. Marion Paddle, CS, 75 HP
300 Cu. Ft. CS Dbl. Cone, 30 HP
200 Cu. Ft. KS 316SS Dbl. Cone
175 Cu. Ft. P-K Twin Shell, 316SS
69.3 Cu. Ft. CS Dbl. Cone, 7.5 HP
63 Cu. Ft. Marion Paddle, CS
60 Cu. Ft. 304 SS P-K, Twin Shell, w/int. bar
60 Cu. Ft. Gemco Dbl. Cone, 304SS
37 Cu. Ft. Gemco SS
30 Cu. Ft. P-k, 304 SS, W/liq. bar.
20 Cu. Ft.P-K, Twin shell, SS
16 Cu. Ft. Robinson Dbl. Rbn. CS
15 Cu. Ft. WC Marion SS
10 Cu. Ft. Gemco dbl. cone, CS, 1½HP
10 Cu. Ft. P-K Sanit Twin Shell 1½HP
10 Cu. Ft. Howes, CS, Dbl. Rbn.
5 Cu. Ft., SS, Dbl. Cone W/liquid-solids bar
2 Cu. Ft. P- K Twin Shell, SS Constr., w/pin int. bar
10" P-K zig zag

FILTERS

Pressure Leaf

1-562 Sq. Ft., 316ELC, Hercules, 28 leaves
1-512 Sq. Ft., 316SS, Niagara, 21 leaves
1-400 Sq. Ft. R/L Sparkler
1-327 Sq. Ft., 304SS, Ind. Filter, 11 leaves
1-320 Sq. Ft. Durco 316 SS, 11 Leaves
1-259 Sq. Ft. Pronto Mdl. #3259, 75 psig
1-200 Sq. Ft., SS, Hercules, Horiz.
1-191 Sq. Ft. Enzinger, SS, Vert., 75 psi
1 - 157.64 sq. Ft. Sparkler model 55-5-28, 316SS
1-150 Sq. Ft. Horiz., 12 Vert. Leaf 316SS
1-135 Sq. Ft. Ni, Bowser, Vert.
1-35 Sq. Ft. Hercules Model 5, 316 SS, horiz. tank vert leaves 50 psi

Rotary Vacuum

1-56.5 Sq. Ft. KS, Inconel 600
1-56.5 Sq. Ft. K-S, 316SS, flexibelt disch.
1-87.92 Sq. Ft. Feinc, SS wetted parts, spring disch., 56" dia. x 6' face drum
1-132 Sq. Ft. Dorr Oliver, 304SS, maxibelt disch.
1-200 Sq. Ft. Eimco, 316SS, 8'x8'
4-250 Sq. Ft. D.O. 316L SS Precoat, 8" x10', sanit
1-250 Sq. Ft. K-S 316SS, coil disch.
1-300 Sq. Ft. Eimco, 316SS wetted parts, precoat type w/knife disch., 10" dia. x 10' drum, compit. w/control panel & aux. equipment
1-314 Sq. Ft. Eimco, precoat disch., 316SS
1-400 Sq. Ft. Eimco, CS, Precoat
1-500 Sq. Ft. Eimco, 316SS, belt disch.
1-3'x1' 316SS, knife disch.
1-3'x1' Dorr Oliver, FRP w/receiver & Nash H4 vac. pump, 10 HP
1-3'x 1' K-S comp. sys., 316 SS Flex-belt disch

GLASS...GLASS...GLASS

WE ARE GLASS SPECIALISTS WITH A TREMENDOUS INVENTORY FEATURING UNUSED, USED AND REGLASSED ITEMS. OUR SHOP PERSONNEL ARE FULLY TRAINED TO HANDLE GLASS.

REACTORS

Glass Lined

4,000 Gal. Pfaudler, 100/90 psi, TW
4,000 gal Pfaudler, 50/30 psi
3,700 gal Glascote, 50 & FV/90 psi
3,000 gal Glascote, 50 &FV/ 90 psi
3000 gal Pfaudler, 75/90 psi
2,000 gal Pfaudler, 75/90 psi
1,000 Gal. Pfaudler, 100&FV/90 psi, 4RW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4DW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4TW
800 Gal. SS clad, 60/60 psi
750 gal. DeDietrick, Phila drive
500 Gal. Pfaudler, 100&FV/85 psi, BH drive

Stainless Steel

4,000 Gal. 316SS, Atmos./50 psi, withcoils
3,000 Gal. 347SS Blaw Knox, 150/50 psi
2,500 Gal. 316L SS, 75/75 psi, 150 psi int. coils
2000 Gal. Nooter Autoclave, 316L 2000 psi, FV int. coils
2,000 Gal. Dusenberg, 316 SS,15/35 & FV int., 50 psi jkt.
1,750 Gal. 316SS Nolte, 1467/50 psi
1,500 Gal. 304SS, 10 HP Lightnin
1,500 Gal. 304 SS, 100/30 psi
1,000 Gal. 304SS, 250/80 psi
1,000 Gal. 316SS, 50/75 psi jkt
1,000 Gal. 316 SS, 15 & FV/50, 10 HP
1,000 Gal. 316 SS, 100/30 10 HP
750 Gal. 316SS, 75 & FV/50 psi
750 Gal. 304SS, 50/60 psi
600 Gal. 316SS, 3000psi, 10 HP
600 Gal. SS, 50 psi, 1.5 HP XP
500 Gal. 316SS, 55 & FV/55 psi
100 Gal. 316SS, 15/50 psi
100 Gal. 316ELC SS, 500/90 psi

★★★ SPECIAL OFFER ★★★
4-DRAIS SAND MILLS, TYPE PM-80-STS-DDA. MANUFACTURED 1984-85.
PRICED TO SELL • CALL FOR DETAILS

RECENT PURCHASES

●● FILTER BONANZA ●●
Sparkler pressure leaf Filters,
All stainless Steel Construction
2-Model #33D9 1-Model #184D
1-Model #18D12 1-Model #33S28

Model DASO - 6 jkt Fitzmill, SS
Model DASO - 12 jkt Fitzmill, SS
16"x 12"x 42" SS Pugmill, 3HP Varispeed
40"x20" Tolhurst centrifuge, Kynar lined, perf. basket
4500 Gal SS mixtank, 50 psi
3500 Gal SS mixtank, 50 psi
400 gal. G/L Pfaudler Vert Reciever, 55 Psi.
St Regis Bag Packer, Model#718 MLT.
5000 Gal. 304 SS jcktd., Mix Tank
2' dia. x 3' Chrome Plated Flaker
Alfa-Laval Centrifuge, Model NX214/314.
8000gal. CS, Ammonia Storage Tank, 250 PSI.
60 cu. ft.PK Blender 304 SS w/int. bar
63 cu. ft. C/S Marion Paddle Blender
2 cu. ft. PK Blender w/pin bar SS
175 cu. ft. PK Blender 316 SS
3.5 cu. ft. Prodex-Henschel Mixer, SS
500 liter Welex Mixers, SS
Littleford FKM-600 Mixer SS (2)
1750 gal. Reactor 316 SS, 15 PSI int. 40 psi Jckt
1000 gal. 316 SS Reactor, 15 & FV/50 psi jkt., 10 HP
1000 gal. 316 SS Reactor, 100/30 psi jkt., 10 HP

ATTRACTIVELY PRICED

1 - Approx. 51 Sq. Ft., Pfaudler, Wiped Film Evapor. 316 SS wetted parts ASME Coded,. Jacket rated 100 psi w/internal vacuum. Complete w/flange mounted motor to Pfaudler TW drive w/-mechanical seal, lubricator & integral heat exchanger.

Call today for more details.

MIXERS

4.5 Gal. Kneader Master Cont., SS w/jkt.
5 Gal. AMK 304SS Jcktd. Kneader Extruder
15 Gal. W.C. Readco Sigma Blade Dbl. arm
25 gal. Readco DBL/Arm Sigma Blade jktd. SS construction 15 H.P.
80 Gal. Hockmeyer Pony, SS contacts, 7.5 HP varispeed
100 Gal., SS, Sigma Blade, Jcktd. 40 HP
200 gal. W-P CS dble arm Sigma blade, 20 HP
250 gal. AMK Kneader Extruder, Sigma Blades, CS construc, 40 psig,trough jkt.
500 liter Welex hi intensity, SS contact parts
500 Gal. S-W Rubber Cement, CS, 2-10 HP motors (2)
Unused 1000 Gal. Sanitary 316SS B-K Dbl. Motion Change Can; 100&FV/165 PSI, 125HP
Littleford Model FKM-600D, SS
Littleford Model FKM-600S, SS
Littleford Model FKM-2000, SS, w/choppers
Littleford Model FM 100 Sanit. SS w/choppers
3.5.Cu. Ft. Prodex Henchel Mdl. 35 J SS, SS Const.
7 Cu. Ft. 304SS Nauta Model MBX-70
10.6 Cu. Ft. Nauta D-105, CS
Welding Eng. Model 2FV1V2S Twin screw Extruder, SS, Contacts, 150 psi
Koehring mdl. 350, 40 HP

PLUS LOTS - LOTS MORE

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CMR MARKETPLACE

CHEMICAL MARKETING REPORTER'S CLASSIFIED ADVERTISING SECTION

COPY DEADLINE: Wednesday Noon preceding date of publication.

RATES/Classified Ads: $57.75 for 36 words or less; $9.75 for each additional six words or fraction. No display. First two words printed in bold face type. Non-display advertisements payable in advance, except for contract customers (not subject to agency commission).

REPLIES: Send replies to classified ads with box numbers to **CHEMICAL MARKETING REPORTER**, 100 Church St., New York, NY 10007-2694.

INFORMATION: For further classified advertising information, call **212/732-9820.**

BUSINESS OPPORTUNITIES

Established Canadian chemical distributor looking for additional product lines for industrial and food applications. Suppliers should be able to provide long-term commitment and technical back-up; in return for specialized/custom sales force, national warehousing and ongoing market presence. Write Box No. CMR-730.

CHEMICALS OFFERED

Glycerine natural USP 99.5 — new drums — low low prices regular supply — available from New Jersey/Baltimore/Houston/West Coast warehouses. Inquire now. Write C M.R Box No. 729.

"Dyestuffs, Dye Intermediates, Pigments, Fast Bases and Napthols at the price of surplus material. For detail list of products, quotations and samples contact GTF International Inc. 2 Holly Drive; Parlin, New Jersey 08859. Phone: (201) 727-2188 Telex: 844-221 GEETAF PRLN."

CHEMICALS OFFERED/WANTED

We can supply n-butyl alcohol, isobutyl alcohol, butyl acetate, glycol ether, chlorinated hydrocarbons, esters, ketones, aliphatics and aromatics, and styrene monomers. If you have any reasonable quantity of surplus chemicals call Ben Sayer Chemicals International Inc., 312/446-9280, 540 Frontage Road, Northfield, IL 60093.

CHEMICALS WANTED

Active Buyer of surplus chemicals, pigments, dyes, resins, waxes, plastics etc. Call toll free 1-800-631-3337 or 617-829-6736. Deer Polymer Corp. Chemical Div. 17 Industrial Drive, Holden, MA 01520

All Surplus — Chemicals — Resins — Oils — Colors Solvents — Plasticizers — Specialties — Intermediates — bought by Rambach Chemical Co., Inc. 52 Vesey Street, PO Box 5187, Newark, NJ 07105 Phone: (201) 589-7774.

Cash For your surplus chemicals, resins, colors, pharmaceuticals, dyes, other raw materials, by products, wastes, residues and off-spec materials. Morgan Chemicals Inc., 5500 Main Street, Williamsville, NY 04221 (716) 632-4000; Telex 919133.

Realize Top Value from the sale of your surplus Chemicals. We buy surplus Chemicals, Plastics, Resins, Waxes, etc. Bonmar Chemical Co, P O. Box 494, Fair Lawn, NJ 07410. Phone: (201) 791-2448, Telex. 13-0434.

Resyn Corp. will buy your surplus chemicals, resins and resin raw materials — prime or off-specification, Resyn Corp P O Box 63, 1540 W. Blancke St., Linden, NJ 07036 (201) 862-8787.

We Buy Surplus chemicals, colors, resins, solvents, plasticizers by-products, etc. Over 50 years of service to industry. Eastern Color & Chemical Co., Inc 65 Roosevelt Ave., Dept. C.P O. Box 1029, Valley Stream, N.Y. 11582. (516) 791-4445

Your Surplus is our inventory. We buy all chemicals, pigments, resins, solvents, plasticizers and pharmaceuticals. Prompt inspection and cash terms on each offering. Pyramid Chemical Sales Co., 1035 Virginia Drive, Fort Washington, PA 19034. (215) 542-9292.

Zinc Bearing by-products, sludges, scrap, will consider all zinc compounds, metallics, etc. Please reply with estimated quantity, typical analysis, and best price F.O.B. origin Write CMR: 736.

EQUIPMENT OFFERED

Available for removal costs 150 ton dry storage silo with stand Drumming and bulk capabilities. Construction–Steel Height–approx 75' w/stand. Inquire McKesson Chemical (201) 836-4060

Immed. Sale: 2-750 gal glasslined Reactors, 1-48" rubberlined Centrifuge, 2-Fluid Bed Dryers, 1-250 H.P. oil fired Steam Boiler, Fiberglass Tanks Make offer, more equipment available AARMCO, INC, Box 66, Wood River Jct R I 02894 401-364-9149.

Ribbon Blenders, 600 cu. ft working capacity, Strong Scott Jacketed, Covers, Stainless 66 cu ft. Jacketed, Several 125 cu ft Units Also Crushers, Grinding Mills, Screeners, Dust Collectors, (2) Bobcat Skid Steer Loaders #901-872-2295

FACILITIES OFFERED

Hydrogenations — Very High Pressure Batch Hydrogenation and Distillation facility now available for contract manufacturing Pressure to 70 Bar (1000 psi) and temperature to 200°C. Distillations down to 3 mm vacuum; Autoclave processes from low tonnages to 500 gallon capacitors in mild and/or stainless steel batch production runs. Can use various catalysts. Also custom short or long-term specialty reductive aminations available. Please contact or write John Flood, Prochemie International Inc. 488 Madison Avenue, New York, NY 10022 212-688-9240.

POSITIONS OFFERED

Market Research. Falls Church, Va. office of Mathtech, Inc., an employee-owned technical consulting firm seeks individual with 3-5 years of industry experience to analyze organic chemical markets. Must be familiar with wide range of chemicals, uses, and production processes. Bachelor's degree in chemistry or chemical engineering and excellent communications skills required. Advanced degree preferable. Familiarity with data sources and market research terminology desireable. Competitive salary plus excellent benefits. Send resume (must include salary history) to Albert Kreger, Mathtech, Inc., 210 Carnegie Center, Suite 200, Princeton, NJ 08540. Equal Opportunity Employer.

"We are a growing Dyes and Chemical Importer/Exporter located in Central New Jersey and are looking for the aggressive salesperson's either part time or full time for marketing Dyestuff, Dye Intermediates, Pigments and Chemicals to serve the textile, paper, carpet, ink and coating industries in North Carolina, South Carolina, and North-East U.S.A. Experience in the above industries is a plus but not necessary. Excellent remuneration. Send resume to C.M.R. 737."

POSITIONS WANTED

Consultant Available — Over 30 years experience — covering marketing, sales, distribution, long range planning, and other areas. Reasonable rates for expert assistance, in your future plans. International marketing is one of our strong areas. CMR 735.

"Young, aggressive chemical trader seeking career opportunity in chemical import/export areas. Seven years experience in international chemical trading with M.B.A. in international business. Active in flavor and fragrance, cosmetic, pharmaceutical, food and beverage, textile industries." CMR 734.

SERVICES OFFERED

Custom solids packaging and distribution in the port of Mobile. Multi-wall bags, bulk bags, drums and bulk. Screening, repackaging and warehousing. Rail and truck facilities. Contact: Philip Hahn, SEAPAC, Bldg. 14A, Brookley Complex, Mobile, AL 36615, 205/433-3541.

Reconditioned Drums, cut packaging costs. High grade reconditioned steel drums to meet all DOT specs. 15 gallon-85 gallon. Linings our specialty. Truck load discounts. Used drums removed. Call Drum Service N.Y. 718/494-0255, outside N.Y. 1-800/628-8913.

COATINGS & PLASTICS

Continued from Page 36

pigment loading and to facilitate uniform coverage in automotive applications.

The Division plans to introduce five new organic pigments for use in the three major market segments at the Paint Show in Atlanta this November. They are described as offering excellent lightfastness, flocculation-resistance and better flow characteristics.

PLASTICS MATERIALS

PHENOLIC RESINS — Two other major US producers of phenolic resins have followed Borden Chemical Company's move to increase phenolic resin prices this October.

B.T.L. Specialty Resins Inc. (formerly The Specialty Phenolics Division of Reichhold Chemicals, Inc.) will raise selling prices for dry phenolics, used in friction, foundry and bonded abrasive applications, by 2 c. per pound. Prices for its liquid laminating phenolic grades will be increased by the same amount. Liquid plywood and paperboard grade resins will be increased 1.5 c. per pound. All price changes will be effective October 24.

Borden Chemical's Resins & Chemicals Division and its Industrial Phenolics Division and Acme Resin Corp. subsidiary increased prices for various grades of phenolic resin by 0.5 to 4 c. per pound, effective October 15.

All firms attribute the price increases to higher phenol costs. Prices for phenolic resins fell between 10 and 15 percent earlier this year, pushed by depressed phenol prices and low demand for industrial grades. Demand for commodity construction grades has been strong this year, producers say.

POLYCARBONATE RESINS — Last week's story in this space, "CD Polycarbonates Are Taking Off Now" contained two misprints. Mobay's new CD-grade facility is in Baytown, not Bayport Tex., as stated in the opening paragraph. The trade name for this grade of polycarbonate is "Makrolon CD-2000".

MISCELLANEOUS

SULFATE TURPENTINE — Producers say that little has changed in the sulfate turpentine market since last year, although prices have come down roughly 5c. per gallon since then; they are currently said to range between 60 and 70c. per gallon (for high volume sales).

Demand has been off somewhat in the flavor and fragrance market segment, as supplies of cheaper d-limonene have been plentiful. Terpene resin demand for turpentine is said to show little change since last year.

Supplies are said to be "out of balance on the long side" by one producer. Stocks of the resins, byproducts of the papermaking and linerboard business, reflect the health of these two markets. In the first quarter of 1985, the linerboard business was not doing well, and supplies of turpentine were quite low.

CHEMICAL IMPORTS

Continued from Page 39

MALEIC ANHYDRIDE 710 bgs (40,128 lbs) (Kazimierz Pulaski) Rotterdam, 9/13.
MALONITRILE Lonza 2 dms (992 lbs) (Dusseldorf Express) Bremerhaven, 9/2.
MANNITOL Davos Chemical 120 dms (22,487 lbs) (American Michigan) Rio D Janeiro, 9/7.
MARJORAM Agricola Packing & Trdg 500 bgs (24,250 lbs) (Falmouth Bay) Felixstowe, 9/4.
MELAMINE MOULDING COMPOUND 1640 bgs (90,388 lbs) (Zim Hong Kong) Haifa, 9/9.
MENADIONE SODIO BISULFITE Roehlig Fwdg 100 dms (11,906 lbs) (Sea Land Pacer) Algeciras, 9/2.
MENTHOL CRYSTALS Irving R Boody 189 dms (21,546 lbs) (Chao He) Shanghai, 9/2.
META TOLUIDINE HAZARDOUS 25 dms (12,236 lbs) (Atlantic Companion) Liverpool, 9/8.
METHALYL CHLORIDE Stolt Tank Containers 5 tnk (178,396 lbs) (Ming Propitious) Kobe, 9/2.
METHIONINE Rhone Poulenc 60 bbg (123,415 lbs) (Sea Land Pacer) Algeciras, 9/2.
3200 bgs (165,786 lbs) (Sea Land Pacer) Algeciras, 9/2.
METHOCARBAMOL Max Gruenhut 34 dms (0 lbs) (Atlantic Star) Rotterdam, 9/8.
METHYL ATRATAE Polarome Mfg 90 dms (10,714 lbs) (Zim Hong Kong) Haifa, 9/9.
METHYL CEDRYL KETONE 44 crt (5,432 lbs) (Chao He) SHanghai, 9/2.
METHYL DIHYDROJASMONATE Mitsui 12 dms (5,344 lbs) (Ming Propitious) Kobe, 9/2.
METHYL HIMIC ANHYDRIDE Marubeni America (73 dms (38,625 lbs) (Ever Gather) Tokyo, 9/7.
METHYL METHACRYLATE MONOMER Degussa 1 tnk (40,476 lbs) (Dusseldorf Expres) Bremerhaven, 9/2.
1 tnk (40,036 lbs) (Nurnberg Express) Bremerhaven, 9/8.
1 tnk (39,727 lb) (Aldebaran) Felixstowe, 9/4
METHYL PARABEN NF Total Port Clearance 13 plt (18,111 lbs0 (Zim Hong Kong)) Haifa, 9/9.
METHYL PHENYLACETATE Inter Maritime Fwdg 1 tnk (42,439 lbs) (Falmouth Bay) Rotterdam, 9/4.
MICROCRYSTALLINE WAX Panalpina 41 ctn (38,051 lbs) (Neptune Coral) Kobe 9/5.
MILORI BLUE 407 bgs (22,882 lbs) (American Virginia) Kobe, 9/5.
MINERAL WAX Strohmeyer & Arpe 1323 bgs (134,611 lbs) (Ever Laurel) Hamburg, 9/9
MONO BUTYL METHYL CRESOL Stolt Tank Containers 1 tnk (35,141 lbs) (Ming Propitious) Kobe, 9/2
MONO PENTAERYTHRITOL Reconchem 1400 bgs (79,862 lbs) (Imperial) Valparaiso, 9/5.
MONOCHLORACETIC ACID Rodoco Chemicals 1 tnk (42,284 lbs) (Dusseldorf Express) Rotterdam, 9/2
MONOCHLOROACETIC ACID Helm New York 810 dms (98,786 lbs) (American Virginia) Hong Kong, 9/5.
MONOSODIUM GLUTAMATE Ajinomoto 700 bgs (39,198 lbs) (Netuno) Santos, 8/29.
1080 dms (116,998 lbs) (Netuno) Santos, 8/29.
Jin Han Food Products 100 ctn (5,071 lbs) (Nedlloyd Clement) Kobe, 9/5.
MONOSODIUM PHOSPHATE American Pacific Lines 720 ctn (39,663 lbs) (Hanjin New York) Keelung, 9/4.
MUSK XYLENE 270 kgs (31,360 lbs) (Husum) Rotterdam, 9/11.
n-BUTYL METHACRYLATE Surface Air Intl 1 tnk (39,630 lbs) (Aldebaran) Felixstowe, 9/4.
Degussa 2 tnk (78,433 lbs) (Nurnberg Express) Bremerhaven, 9/9.
1 tnk (39,551 lbs) (Aldebaran) Felixstowe, 9/4.
n-CYANOETHYL N ACETOXYETHYL ANIL Lonza 34 dms (16,865 lbs) (Dusseldorf Express) Bremerhaven, 9/2.
NAPHTHOQUINONE SYNTHETIC RESIN MW Hardy 70 dms (8,457 lbs) (Ever Gather) Osaka, 9/7.
NATURAL MENTHOL CRYSTALS YSC BRA Sarcom 20 dms (2,407 lbs) (Netuno) Santos, 8/29.
NICOTINAMIDE Reilly Tar & Chemical 800 bgs (44,621 lbs) (Dusseldorf Express) Antwerp, 9/2.
NUTMEGS Leyden Customs Expediters 420 bgs (32,778 lbs) (Aldebaran) Rotterdam, 9/4.

O-P

OIL BLACK PEPPER 7 ctn (611 lbs) (Vishva Parag) Algeciras, 9/7.
OIL MACE 10 dms (4,431 lbs) (Ever Gather) Singapore, 9/7.
OLEORESIN CAPSICUM 12 dms (1,213 lbs) (Vishva Parag) Algeciras, 9/7.
OLIVE OIL Berio Imports 2,520 cs (88,427 lbs) (Hreljin) Leghorn, 9/9.
Bertolli 12274 ctn (211,802 lbs) (Americana) Leghorn, 9/6.
Catania Spagna 2 tnk (78,749 lbs) (Sea Land Pacer) Algeciras, 9/2.
Krinos Foods 1000 ctn (44,092 lbs) (Cape Henry) Piraeus, 9/8.
Pope Food Sales 1890 crt (49,416 lbs) (Americana) Naples, 9/5.
Taormina Sales 1000 cs (47,192 lbs) (Colombo) Genoa, 9/12.
ORANGE ESSENCE OIL JPM Imports 28 dms (11,482 lbs) (San Martin I) Santos, 9/3.
OREGANO Krinos Foods 1100 bgs (22,000 lbs) (Mercandian Admiral) Izmir, 9/7.
1100 (22,000 lbs) (American Resolute) Istanbul, 9/8.
Max Van Pels 551 bgs (11,030 lbs) (Mercandian Admiral) Izmir, 9/7.
Morris J Golombeck 551 bgs (11,023 lbs) (American Resolute) Piraeus, 9/8.
Quality Spice 551 bgs (11,023 lbs) (American Resolute) Piraeus, 9/8.
Schiff Food Products 600 bgs (0 lbs) (American Resolute) Izmir, 9/8.
OREGANO LEAVES William F Martin & Sons 1212 bgs (11,004 lbs) (Express) Marseille, 9/15.
OXALIC ACID Daniel F Young 1400 bgs (77,934 lbs) (Chao He) Shanghai, 9/2.
700 bgs (39,044 lbs) (American Virginia) Kobe, 9/5.
Inter Maritime Fwdg 700 bgs (38,967 lbs) (Chao He) Shanghai, 9/2.
Mitsui 1544 bgs (78,291 lbs) (Chao He) Shanghai, 9/2.
TR America Chemicals 2145 bgs (119,169 lbs) (American Michigan) Rio D Janeiro, 9/7.

P A TANISIDINE Penson 400 dms (50,265 lbs) (Nedlloyd Clement) Kobe, 9/5.
p-ACETAMINOBENZENESULFONYL CHLOR Mitsui 1660 dms (100,001 lbs) (Ming Propitious) Kobe, 9/2.
p-HYDROXYBENZOIC ACID Ueno Fine Chemical Ind 850 bgs (38,228 lbs) (Ming Propitious) Kobe, 9/2.
PALM OIL & EMPTY CANS JR Weeks 9 mix (2,233 lbs) (Port Harcourt) Monrovia, 9/8.
PAPRIKA Griffith Laboratories 2250 bgs (114,584 lbs) (Cape Henry) Valencia, 9/8.
PAPRIKA EXTRACT Ludwig Mueller 350 bgs (36,652 lbs) (Sea Land Pioneer) Algeciras, 9/9.
386 pkg (12,952 lbs) (Sea Land Pioneer) Algeciras, 9/9.
PARA CHLORONITROBENZENE 2 tnk (18,519 lbs) (Sea Land Express) Antwerp, 8/22.
PARA CRESIDINE FUSED Leyden Customs Expediters 72 dms (35,238 lbs) (Ming Propitious) Kobe, 9/2.
PARA CRESOL Biddle Sawyer 2 tnk (80,225 lbs) (Aldebaran) Felixstowe, 9/4.
PARA DICHLOROBENZENE Recochem 720 bgs (40,080 lbs) (Netuno) Santos, 8/29.
PARA NITROANILINE Silvey Shpg 300 dms (37,699 lbs) (Neptune Coral) Hong Kong, 9/5.
PARA NITROANILINE DRY CRYSTAL Montedison 160 dms (40,666 lbs0 (Colombo) Genoa, 9/12.
PARA TERT BUTYLBENZALDEHYDE 80 dms (35,626 lbs0 (Ever Gather) Osaka, 9/7.
PARA TOLUENESULFONAMIDE Taub Hummel & Schnall 80 bgs (35,626 lbs) (Hanjin New York) Busan, 9/4.
Ecca Freight Systems 3 plt (6,689 lbs) (Dart Americana) Antwerp, 9/9.
PARA TOLUENESULFONIC ACID American Cyanamid 900 bgs (41,349 lbs) (Ming Propitious) Yokohama, 9/2.
PARA TOLUENESULFONYL CHLORIDE Ramiff Chemicals 60 dms (7,277 lbs) (Addiriyah) Dubai, 9/10.
PARACETAMOL, POWDERED BP Universal Transcontinental 320 dms (20,459 lbs) (Chao He) Shanghai, 9/2.
PARAFFIN PETROLEUM WAX Astor Wax 18 pkg (40,874 lbs) (Sea Land Express) Rotterdam, 8/22.
Dura Commodities 720 bgs (43,276 lbs) (Atlantic Saga) Le Havre, 9/1.
PARAFFIN WAX Frank B Ross 3753 ctn (248,150 lbs) (Atlantic Star) Bremerhaven, 9/8.
Napp Chemicals 32 bgs (1843 lbs) (Nurnberg Express) Hamburg, 9/9
Panalpina 6960 ctn (346,605 lbs) (Falmouth Bay) Felixstowe, 9/4.
PERCHLOROETHYLENE 1 bks (1,157,856 lbs) (Martha A) Rotterdam, 9/7
PHENAZOPYRIDINE MEPHOBARIBITAL V Alltransport 54 mix (6,393 lbs) (Atlantic Star) Le Havre, 9/8.
PHENOBARBITAL Chorney 8 dms (952 lbs) (American Lynx) Bremerhaven, 9/4
PHENYL THIOUREA 5 ctn (121 lbs) (Nedlloyd Clement) Kobe, 9/5.
POLYAMID POLYMER Alm 20 pkg (46,017 lbs) (Zim Hong Kong) Haifa, 9/9
POLYCARBONATE RESIN Marubeni America 31 bbg (44,459 lbs) (Chao He) Kobe, 9/2.
POLYETHER GLYCOL 1 con (7,275 lbs) (San Martin I) Buenos Aires, 9/3.
POLYISOPRENE RUBBER NIPOL Alba Fwdg 972 bls (80,080 lbs) (Neptune Coral) Kobe, 9/5
POLYMETACRYLATE American Import Service 1 dms (121 lbs) (Falmouth Bay) Rotterdam, 9/4.
POLYMETACRYLATE HARMLESS COmpo Ind 22 dms (2,4712 lbs) (Falmouth Bay) Rotterdam, 9/4
POLYTETRAFLUOROETHYLENE Sumitomo of America 1200 dms (37,445 lbs) (Nedlloyd Clement) Kobe, 9/5.
260 dms (32,072 lbs) (Leda Maersk) Tokyo, 9/18.
POLYTETRAFLUOROETHYLENE SYNTH RE Montedison 130 crt (14,550 lbs) (Cape Henry) La Spezia, 9/8.
128 dms (46,738 lbs) (Cape Henry) La Spezia, 9/8.
Tomen Warehouse 150 dms (11,199 lbs) (Alva Maersk) Genoa, 9/10.
POLYTETRAHYDROFURAN 1 tnk (39,903 lbs) (Clarence) Bremerhaven, 9/10.
1 tnk (39,595 lbs) (Clarence) Bremerhaven, 9/10.
POLYVINYL ALCOHOL Inter Maritime Fwdg 810 pkg (85,010 lbs) (Neptune Coral) Kobe, 9/5.
POLYVINYL CHLORIDE Tarkett 759 bgs (43,431 lbs) (Ever Laurel) Hamburg, 9/9.
POTASSIUM CARBONATE BDP Intl 1 con (41,138 lbs) (Elvira Orla) Rotterdam, 9/9.
POTASSIUM CARBONATE SOLUTION Atlantis Line 50 ctn (0 lbs) (Chao He) Kobe, 9/2.
POTASSIUM CHLORATE TR America Chemicals 160 dms (47,207 lbs) (Sea Land Pacer) Algeciras, 9/2.
Universal Match 192 dms (40,984 lbs) (Nurnberg Express) Bremerhaven, 9/9.
POTASSIUM CYANIDE Degussa 360 dms (39,573 lbs) (Dusseldorf Express) Rotterdam, 9/2.
360 dms (39,573 lbs) (Nurnberg Express) Rotterdam, 9/9.
POTASSIUM HYDROXIDE Mallinckrodt 358 dms (41,751 lbs) (Sea Land Voyager) Bremerhaven, 9/4.
PROMETHAZINE BASE Rhone Poulenc 16 dms (994 lbs) (Atlantic Saga) Le Havre, 9/1.
PSEUDOEPHEDRINE 1 cs (13 lbs) (Nurnberg Express) Bremerhaven, 9/9.
PSEUDOEPHEDRINE SULFATE 48 dms (5,461 lbs) (Nurnberg Express) Bremerhaven, 9/9.
PSYLLIUM SEED HUSK Premcem Gums 320 dms (35,122 lbs) (Neptune Coral) Singapore, 9/5.
PSYLLIUM SEED HUSK POWDER Rowell. Laboratories 380 dms (41,800 lbs) (American Lynx) Karachi, 9/4.
PURAL NG ALUMINIA Norton 800 bgs (44,092 lbs) (Ever Laurel) Hamburg, 9/9.

R-S

RAW INDIAN OPIUM Mallinckrodt 500 cht (76,976 lbs) (Vishva Parag) Algeciras, 9/7.
RED OXIDE Roehlig Fwdg 884 bgs (44,709 lbs) (Alva Maersk) Valencia, 9/10.
ROCK SALT 1 bks (35,776,776 lbs) (Seaduke) Pto Empedocl, 9/4.
ROSEMARY Louis Furth 280 bgs (30,800 lbs) (Cape Henry) Valencia, 9/8.
RUTIN Byron Chemical 10 dms (1,268 lbs) (Lloyd Atlantico) Fortaleza, 9/4.
Karl Schroff 20 dms (2,535 lbs) (Lloyd Atlantico) Fortaleza, 9/4.
SACCHARIN INSOLUBLE Mitrans 4 ctn (324 lbs) (Neptune Coral) Kobe, 9/5.
SALT Cosmo Imports & Exports 800 bgs (44,092 lbs) (Falmouth Bay) Rotterdam, 9/4.
Julina Imports 800 pcs (44,092 lbs) (Falmouth Bay) Rotterdam, 9/4.
SARAWAK BLACK PEPPER DUSTS Jet Dispatch 56 bgs (3,748 lbs) (McKinney Maersk) Singapore, 9/4.
SARAWAL BLACK PEPPER NO 1 BROWN Man Producten 210 bgs (33,069 lbs) (Ever Gather) Singapore, 9/7.
SASSAFRAS ESSENTIAL OIL Beffe 28 dms (14,899 lbs) (Lloyd Atlantico) Rio D Janeiro, 9/4.
SCHAEFFER ACID POTASSIUM Montedison 160 mix (43,210 lbs) (Colombo) Genoa, 9/12.

ADVERTISERS' INDEX

SEBACIC ACID ICD Group 1200 bgs (66,932 lbs) (American Virginia) Hong Kong, 9/5.
SODIUM BENZOATE American Intl Chemical 880 bgs (45,812 lbs) (Husum) Rotterdam, 9/11.
SODIUM BENZOATE BP 80 POWDER Amalgamated Metal 640 bgs (35,980 lbs) (Chao He) SHanghai, 9/2.
SODIUM BENZOATE FLAKES 399 bgs (22,432 lbs) (American Virginia) Kobe, 9/5.
SODIUM BICARBONATE Alpha Intl 360 bgs (40,318 lbs) (Elvira Orla) Rotterdam, 9/9
American Pacific Lines 720 bgs (39,573 lbs) (Hanjin New York) Keelung, 9/4.
Vitusa 2835 bgs (318,555 lbs) (Ever Laurel) Antwerp, 9/6.
SODIUM BICHROMATE ANHYDROUS 100 plt (450,620 lbs) (Mercandian Admiral) Mersin, 9/7.
SODIUM CARBOXY METHYL CELLULOSE Robeco Chemicals 40 sks (48,297 lbs) (Ever Laurel) Rotterdam, 9/9.
SODIUM CHLORITE Degussa 238 dms (44,397 lbs) (Sea Land Express) Bremerhaven, 8/22.
SODIUM FLUORIDE 18 dms (2,178 lbs) (Nurnberg Express) Bremerhaven, 9/2.
SODIUM FLUORIDE CRYSTALLINE Trans World Shpg 700 bgs (38,873 lbs) (Ever Gather) Osaka, 9/7.
SODIUM GLUCONATE REGULAR PMP Fermentation Products 1600 bgs (80,953 lbs) (Ming Propitious) Kobe, 9/2.
SODIUM HEXAMETAPHOSPHATE Organic Specialty 350 bgs (38,736 lbs) (American Virginia) Kobe, 9/5.
SODIUM HYDROSULFITE Comintrans 157 dms (42,194 lbs) (Elvira Orla) Rotterdam, 9/9.
SODIUM HYDROXIDE Mallinckrodt 336 dms (39,185 lbs) (Atlantic Companion) Gothenburg, 9/8.
336 dms (39,185 lbs) (Dart Americana) Bremerhaven, 9/9.
SODIUM HYPOPHOSPHITE Atochem 124 dms (41,204 lbs) (Ever Superb) Fos, 9/11.
124 dms (41,204 lbs) (Ever Spring) Fos, 9/13.
SODIUM METHOXIDE POWDER Kay Fries 152 brl (38,467 lbs) (Kazimierz Pulaski) Bremerhaven, 9/13.
SODIUM OCTYL SULPHATE Henkel 100 bgs (3,373 lbs) (Clarence) Antwerp, 9/10.
SODIUM PERBORATE MONOHYDRATE Degussa 513 bgs (39,041 lbs) (Dusseldorf Express) Hamburg, 9/2.
SODIUM PERBORATE TETRAHYDRATE 18 Degussa 420 bgs (42,463 lbs) (Sea Land Express) Antwerp, 8/22.
SODIUM SELENITE POISON B Degussa 40 dms (2,372 lbs) (Nurnberg Express) Bremerhaven, 9/9.
SODIUM TRIPOLYPHOSPHATE 1560 (89,286 lbs) (Zim Hong Kong) Haifa, 9/9.
SODIUM TRIPOLYPHOSPHATE HEAVY GR Browning Chemical 400 bgs (41,711 lbs) Hamburg, 9/11.
SORBIC ACID Total Port Clearance 200 dms (22,201 lbs) (Chao He) Kobe, 9/2.
STYRALLYL ACETATE Rhone Poulenc 26 dms (12,291 lbs) (Netuno) Santos, 8/29.
SUCCINIMIDE Rhone Poulenc 40 dms (3,240 lbs) (Express) Marseille, 9/15.
SULFADIMIDINE Universal Transcontinental 380 dms (23,810 lbs) (American Virginia) Hong Kong, 9/5.
SULFAMERAZINE Richard Bose 20 dms (1,314 lbs) (Dusseldorf Express) Hamburg, 9/2.
SULFAMETHOXAZOLE Shionogi 42 dms (5,093 lbs) (McKinney Maersk) Kobe, 9/4.
SULFAMIC ACID Daniel F Young 6,800 bgs (157,400 lbs) (Ming Propitious) Kobe, 9/2.
Marubeni America 770 bgs (38,846 lbs) (Ever Gather) Osaka, 9/7.
SULPHUR M. Pagan Sons 50 pkg (110 lbs) (Zim Hong Kong) Barcelona, 9/8.
SULPHUR HEXAFLUORIDE Montedison 330 cyl (76,758 lbs) (Colombo) Leghorn, 9/12.
SULPHUR HEXAFLUORIDE CYLINDERS Matheson Gas Products 2 cyl (220 lbs) (Columbus Queensla) Sydney, 8/21.
SULPHURIC CHLORIDE ICT Consultants 1 tnk (41,094 lbs) (Kazimierz Pulaski) Rotterdam, 9/13.

T-U

TALC Alltransport 5 ctn (1,598 lbs) (Clarence) Le Havre, 9/10.
TERPINEN Mercon Line 12 dms (242 lbs) (Act 5) Sydney, 9/11.
TERTIARY BUTYL BENZALDEHYDE 80 dms (39,793 lbs) (Ming Propitious) Keelung, 9/2.
TERTIARY DODECYL MERCAPTAN 1 tnk (42,196 lbs) (Ever Superb) Fos, 9/11.
TETRACYCLINE Port Brokers 712 dms (38,456 lbs) (Chao He) Shanghai, 9/2.
THEOPHYLLINE ANHYDROUS D Hauser 120 dms (14,266 lbs) (Dusseldorf Express) Hamburg, 9/2.
THERMOPLASTIC POLYURETHANE ELAST 26 dms (2,648 lbs) (Dusseldorf Express) Bremerhaven, 9/2.
THIAMINE MONONITRATE K&M Custom Brokers 108 dms (7,011 lbs) (Chao He) Shanghai, 9/2.
THIOACETAMIDE REGULAR 180 dms (19,753 lbs) (Ming Propitious) Kobe, 9/2.
THIOAMIDE COMPOUND Alltransport 340 dms (20,988 lbs) (Ming Propitious) Kobe, 9/2.
THIONYL CHLORIDE Fluka Chemical 13 bxs (1,792 lbs) (Sea Land Voyager) Rotterdam, 9/4.
THIOUREA ICD Group 590 bgs (37,628 lbs) (American Virginia) Hong Kong, 9/5.
THIOUREA DIOXIDE Degussa 120 dms (27,804 lbs) (Dusseldorf Express) Hamburg, 9/2.
TOLUENE DIISOCYANATE Bollatex Athletic Surface 65 dms (30,523 lbs) (Nurnberg Express) Greenock, 9/9.
TRIALLYL CYANURATE Degussa 80 dms (39,559 lbs) (Dusseldorf Express) Hamburg, 9/2.
TRIETHYL ORTHOACETATE Volainer Consolidation Servi 10 dms (4,409 lbs) (Aldebaran) Bremen, 9/4.
TRIMETHOPRIM ICC Ind 80 dms (5,203 lbs) (Nippon Corsi) Hong Kong, 9/5.
TRIMETHYLOLPROPANE Leschaco 1 tnk (42,152 lbs) (Dusseldorf Express) Rotterdam, 9/2.
TRIMETHYLOLPROPANE HEATING SURCH Leschaco 1 tnk (42,549 lbs) (Nurnberg Express) Rotterdam, 9/9.
TRIPELENNAMINE HCL Richard Bose 1 dms (119 lbs) (Dusseldorf Express) Hamburg, 9/2.
ULTRAMARINE PIGMENT Whittaker Clark & Daniels 880 bgs (39015 lbs) (Dart Continent) Felixstowe, 9/11.
ULTRAMARINE PIGMENTS Sico Shpg 18 plt (41310 lbs) (Husum) Rotterdam, 9/11.
UREA FORMALDEHYDE MOULDING 825 bgs (45470 lbs) (Zim Hong Kong) Haifa, 9/9.
URETHANE RAW MATERIAL 130 pkg (37871 lbs) (Ever Laurel) Hamburg, 9/9.
Schenkers Intl Fwdrs 24 plt (23067 lbs) (Ever Laurel) Hamburg, 9/9.
VINYL PYRROLIDONE 1 tnk (39903 lbs) (Husum) Rotterdam, 9/11.
ZINC OXIDE Klockner Chemical 48 plt (78799 lbs) (Aro Aeolos) Callao, 9/8.
Panalpina 2 plt (2353 lbs) (Americana) Valencia, 9/15.
Rovell Chemicals 72 plt (116198 lbs) (Aro Aeolos) Callao, 9/8.
ZINC PEROXIDE 7 dms (1199 lbs) (Dusseldorf Express) Hamburg, 9/2.
ZINC PYRITHIONE 165 dms (48848 lbs) (Aldebaran) Bremen, 9/4.
ZINC SULPHATE HEPTAHYDRATE United Mineral & Chemical 350 bgs (38630 lbs) (Husum) Rotterdam, 9/11.

CHEMICAL PROFILE

CAPROLACTAM

OCTOBER 13, 1986

SUPPLY

PRODUCER	CAPACITY*
Allied, Hopewell, Va.	560
BASF, Freeport, Tex.	350
Nipro, Augusta, Ga.	180
Total	1,090

*Millions of pounds per year. Allied uses phenol as its feedstock, while BASF and Nipro employ cyclohexane. Allied will incrementally expand the Hopewell capacity to 600 million pounds by 1988. Nipro has 180 million pounds of idled capacity at Augusta. Nipro is an entirely merchant supplier. Allied and BASF use the bulk of their output for nylon production. Profile last published 10/24/83; this revision, 10/13/86.

DEMAND

1985: 1,021 million pounds; **1986:** 1,070 million pounds; **1990:** 1,200 million pounds.

GROWTH

Historical (1976-1985): 3 percent per year; **future:** 3 percent per year through 1990.

PRICE

Historical (1952-1986): High, 83c. per pound, molten, f.o.b. works; low, 24½c. per pound, same basis. **Current:** 62c. to 65c. per pound, dlvd., same basis.

USES

Nylon 6 fibers, including monofilament, 87 percent; nylon 6 resins and film, 10 percent; exports, 3 percent.

STRENGTH

Demand for nylon carpet, the largest market for nylon fibers, is strong this year, the result of a booming housing market. Nylon resins consumption, paced by automotive applications, is growing 7 percent annually. On-line capro capacity utilization is virtually 100 percent.

WEAKNESS

Falling oil prices this year has driven down the price of capro raw materials phenol and cyclohexane. Caprolactam prices have fallen in line, dropping from about 70 cents per pound, f.o.b., in January to 62 to 65c. per pound, delivered, at present.

OUTLOOK

Carpet growth is expected to slow to 2 percent annually through the decade. However, the nylon resins market will continue to post good growth rates, especially since US auto markets are incorporating more plastic parts into auto bodies. Demand will continue to strain capacity. Restarting Nipro's idle capacity will help meet demand and both Allied and BASF could add more capacity.

R&D Emphasis Is Major Shift For Management

The emergence of technology as a key factor in business on a world scale has had a marked effect on management attitudes and industrial strategy. So says Dr. Douglas E. Olesen, executive vice-president and chief operating officer of Battelle Memorial Institute.

Speaking before the International Congress on Technology and Technology Exchange held in Pittsburgh last week, he said, "Science, technology and innovation are at the heart of doing things better and smarter, that is, improving productivity and solving human problems in new ways."

"The global economic order of the 1980's," according to Dr. Olesen, "is far removed from the more predictable conditions of just two decades ago. In the mid-1960's, over 75 percent of the world's technology was generated in the United States. Today, only about 50 percent of the world's new technology is American and that is predicted to fall to about 35 percent by 1995."

R&D SPENDING UP

In describing the current competition for new technology, he pointed out that spending for R&D is up in the United States, in Japan, and throughout the industrialized world. In the United States, for the past several years R&D spending by US industry has averaged an increase of at least 5 percent a year.

Looking at present trends and at the future, Dr. Olesen says, "I believe we will see more of the same. I do not see the demand for technology leveling off or settling down. What I do expect is that many companies will become better organized and more adept in acquiring technology they can use in a profitable way. They simply are going to have to be more market-driven, innovative, and flexible to survive and prosper in today's highly competitive global environment."

The Battelle executive identified some of the characteristics of the current era as: the rapid and diverse movement of technology throughout the world, the movement of people with technical expertise within companies and from one company to another, and a faster cycle in bringing products from the laboratory to the marketplace.

"Business leaders see new products as the key to diversification and thus, the way to avoid being suddenly overrun by new technology and ending up with a company with neither markets nor options for the future. Leaders also are scrambling for technology leading to specialty products. There is a great deal of emphasis in some companies in finding a unique niche in the market for specialty products—as opposed to commodities and products available from various sources."

The demand for new products has had a marked effect on the attitude of industrial leaders with respect to their approach to the acquisition of new technology, according to Dr. Oleson. "Only a few years ago—certainly until the beginning of the 1980's—the management of many companies—particularly the larger ones—never considered looking beyond their own organization to obtain new technology."

"What we are seeing now is a recognition by leaders everywhere that no company, no matter how large, can rely entirely upon its own internal resources to stay competitive. The world of technology is simply moving too fast, and too many things are happening. The 'Not Invented Here' syndrome so prevalent in research centers and boardrooms in America and in other industrialized western nations is now a thing of the past."

He cited a number of approaches that companies are using to acquire new technology. One, he said, is to become a limited partner in venture capital partnerships created to invest in new and existing technically-oriented companies. Typically, the kinds of companies in which the partnerships invest are small ones on the leading edge of technology. For companies investing in such partnerships, it is a way of gaining a "window" on new technology.

Another approach is by acquiring other companies or by mergers.

Still another is through joint ventures and joint projects. Illustrative of this are the joint ventures between General Motors and Deere to produce diesel engines and between General Electric and PPG to produce reinforced thermoplastic composite sheets for automobiles and appliances.

Another method cited by Dr. Olesen is one involving large cooperative research programs supported by many companies. The number of these programs has grown significantly in both the United States and Europe.

He emphasized that, in addition to companies reaching outside their own organization, "a good deal is happening internally to generate technology and to do so more quickly. We are seeing a whole new attitude in some companies—an attitude that encourages ideas and a supportive system to evaluate and develop them. Many companies—particularly larger ones—have set up mechanisms within the organization to encourage employees with an entrepreneuring spirit."

"Probably the best news in all of this," he observed, "is that there is no shortage of ideas. They are in good supply. But selecting the right ones and successfully developing them are difficult tasks. Companies need to muster all of the expertise they can—inside and outside—to carry out the selection process."

"Selecting ideas for development and generating new technology" he said, "calls for a keen sense of investment at the highest management level. Some technology development may represent a short-term investment, but much of it is a long-term investment requiring as many as ten years for a return. Successful commercialization takes a lot of expertise, sound judgment, faith, perseverance, and patience.

Dr. Olesen concluded his speech with a look at the US in the years ahead with respect to technology leadership. "I believe we will enjoy more than our share of success."

JOBS & PEOPLE

Lance Renfrow, who has been appointed vice-president and general manager of Holtrachem West, Inc., Anaheim, Calif. Holtrachem West is a subsidiary of Holtrachem, Inc., Natick, Mass.

RICHARD F. BINGHAM has been named director of licensing and joint ventures for the Emulsion Polymers Division of Reichchold Chemicals, Inc... **ROBERT A. NAGY** has been appointed Eastern regional sales manager of Pennwalt Corporation's organic chemicals division. **ROBERT W. BARRENTINE** has been named regional sales manager of Nalco Chemical Company's water treatment chemicals group.

STEVEN F. KRAUS has been appointed controller for Bee Chemical Company of Lansing, Ill. **KISKA THOMPSON** has been named sales representative in the Southeastern territory for Syntex Agribusiness... **RICHARD KENYON** has been named vice-president of operations for Foamfab, Inc., responsible for all shipping, quality assurance, inventory and production.

P. Bingham

R. Nagy

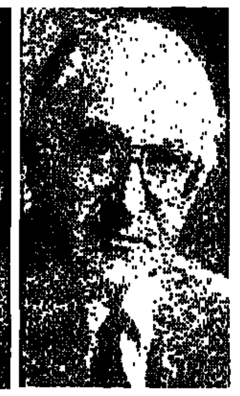
DeWitt Elects New President and VP

DeWitt & Company Inc. has named William C. Bowman president and Peter J. Jordan senior vice-president of its olefins business.

As president, Mr. Bowman will have primary responsibility for DeWitt's olefin consulting.

Mr. Jordan was formerly employed by the Dutch/Shell group of companies, most recently as a representative in Eastern Europe. He will be heading up the European division of DeWitt's olefins business.

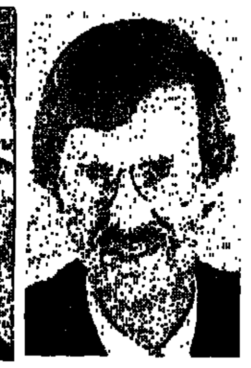
W. Bowman



P. Jordan

BEVERLY J. HOLMAN has joined the Kelco Division of Merck & Co., Inc. as associate technical representative for the Industrial Division... **STANLEY K. DOBKEWITCH** has been named venture manager for the industrial chemicals commercial development department at Air Products & Chemicals, Inc...

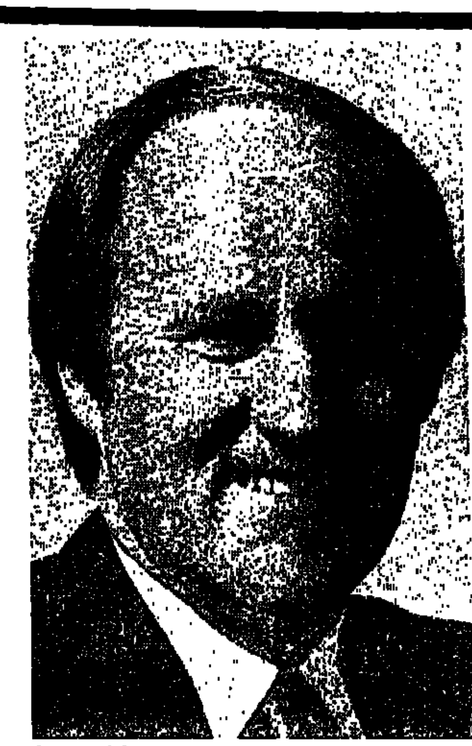
R. Barrentine



S. Kraus

E. GARY COOK has been appointed vice-president of corporate plans at E.I. du Pont de Nemours & Co... **EVERETT W. CAMPBELL** has been named director of production for Goodyear's Chemical Division.

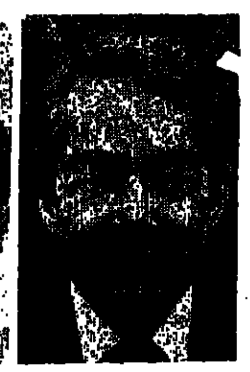
THOMAS B. MACRURY has been elected corporate staff vice-president of research at International Minerals & Chemical Corporation... **JAMES R. LIETO** has been named vice-president and general manager of the "Ortho" Consumer Products Division at Chevron Chemical Company... **NEALE H. BYRNES** has been appointed vice-president of operations at Liquid Carbonic Specialty Gas Corporation.



Leonard Sis, who has been elected vice-president and general manager of the Bulk Gases Division of Liquid Air. Mr. Sis will have full responsibility for sales, marketing, production and distribution of the bulk gases segment.

ANTON M. HENSHAW has been named manager of containers and packaging in the purchasing department of Witco Corporation... **B. CLARE HARRIS** has been appointed vice-president of Monsanto Corporation... **CHARLENE A. GALVIN** has been named director of research and development at Masury-Columbia Company.

K. Thompson



R. Kenyon

FMC Corporation Names Two Managers

FMC Corporation has appointed William J. Wheeler manager of its Phosphorus Chemicals Division and David D. Eckert general manager of specialty chemicals and group development.

Mr. Wheeler joined FMC Corporation in 1968, and was most recently division manager of citrus machinery.

The specialty chemicals area, which Mr. Eckert will administer, will consist of marine colloids and the food and pharmaceutical products divisions.

W. Wheeler

D. Eckert

DAVID CONLEY has been appointed manager of sales and development in the transportation market at Celanese Corporation's "Vectra" business unit... **ROBERT KOLB** has joined Avecor, Inc. as sales representative covering South Carolina, Georgia, Alabama and Florida... **FREDERICK B. OLLETT** has been elected treasurer at Gatx Corporation.

B. Holman

S. Dobkewitch

JAMES D. EWEN has been named technical specialist at Physichem Techologies, Inc. He will be based in the Houston area... **ROY BUDSOCK** has been appointed distributor marketing and brand sales specialist for the Adhesives Division of National Starch & Chemical Corporation.

MEETINGS CALENDAR

October 13, 1986

THIS WEEK

DRUG, CHEMICAL & ALLIED TRADES ASSOCIATION, 96th annual meeting, The Breakers, Palm Beach, Fla., October 15-19.

EUROPEAN CHEMICAL MARKETING RESEARCH ASSOCIATION, 1986 conference, "The Chemical Industry Faces its Future," Switel Eurotel, Antwerp, Belgium, October 13-15.

NATIONAL RENDERERS ASSOCIATION, 53rd annual convention, Ritz-Carlton Hotel, Naples, Fla., October 14-18.

SOCIETY OF CHEMICAL INDUSTRY, chemical industry medal dinner, Plaza Hotel, New York, October 15.

SOCIETY OF THE PLASTICS INDUSTRY, polyurethane division, 30th annual rigid polyurethane technical/marketing conference, Toronto, Ontario, Canada, October 15-17.

OCTOBER

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS & COLORISTS, international conference and exposition, Westin Peachtree Plaza Hotel, Atlanta, Ga., October 28-31.

AMERICAN MICROCHEMICAL SOCIETY, eastern analytical symposium, jointly with American Chemical Society and Society for Applied Spectroscopy, New York Hilton Hotel, New York, October 20-24.

ASSOCIATION OF THE NON-WOVEN FABRICS INDUSTRY, eighth international conference and exposition, Georgia World Congress Center, Atlanta, Ga., October 21-23.

CHEMICAL GROUP, NATIONAL ASSOCIATION OF PURCHASING MANAGEMENT, Fall Conference, Merriott Pavilion Hotel, St. Louis, Mo., October 21-23.

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION, seminar on aerosol technology, Ramada Hotel O'Hare, Rosemont, Ill., October 27-29.

COMMERCIAL DEVELOPMENT ASSOCIATION, impact of mergers and acquisitions on the future of technology-driven corporations, Hershey Hotel, Hershey, Pa., October 26-29.

EUROPEAN PETROCHEMICAL ASSOCIATION, distribution meeting, Hotel Loews, Monte Carlo, Monaco, October 19-22.

FIRE RETARDANT CHEMICALS ASSOCIATION, Fall conference on proper processing and selection of flame retardants, Kiawah Island, S.C., October 19-22.

NOVEMBER

AMERICAN PETROLEUM INSTITUTE, annual meeting, San Francisco, Calif., November 9-11.

CHEMICAL MARKETING RESEARCH ASSOCIATION, business school, personal computers in the workplace, Scanticon Executive Conference Center, Princeton, N.J., November 5-7.

COSMETIC, TOILETRY & FRAGRANCE ASSOCIATION, 1986 scientific conference and exhibit, J.W. Marriott Hotel, Washington, D.C., November 2-5.

DRUG, CHEMICAL & ALLIED TRADES ASSOCIATION, Fall luncheon, Waldorf-Astoria Hotel, New York, November 19.

FERTILIZER ROUND TABLE, Sheraton Inner Harbor Hotel, Baltimore, Md., November 17-19.

FRAGRANCE MATERIALS ASSOCIATION OF THE UNITED STATES, 10th international congress of essential oils, fragrances and flavors; Omni Shoreham Hotel, headquarters hotel, Washington, D.C.; November 16-20.

K-'86, 10th international trade fair for plastics and rubber, Dusseldorf, West Germany, November 6-13.

LATIN AMERICAN PETROCHEMICAL ASSOCIATION, sixth annual meeting, Rio Palace Hotel, Rio de Janeiro, Brazil, November 23-25.

NATIONAL PAINT & COATINGS ASSOCIATION, annual meeting, Atlanta Hilton Hotel, Atlanta, Ga., November 3-5.

LATER ON

CHEM SHOW, 42nd exposition of the chemical industries, Jacob K. Javits Convention Center, New York, New York, December 7-10.

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION, 73rd annual meeting, Marriott's Harbor Beach Resort, Fort Lauderdale, Fla., December 7-11.

NATIONAL ASSOCIATION OF CHEMICAL DISTRIBUTORS, 15th annual meeting, Ritz-Carlton-Naples Hotel, Naples, Fla., December 2-5.

BUSINESS BRIEFS

AIRCO INDUSTRIAL GASES has opened a new liquid helium distribution center in Houston. The facility represents the first commercial liquid helium supply source to be located in Texas, Airco says, and is designed to serve hospitals and health-care facilities that have Magnetic Resonance Imaging (MRI) systems in Texas and Louisiana.

DOW CHEMICAL COMPANY will feature a computer-aided solvent selection system at the 1986 Paint Show, November 5-7, at the Omni in Atlanta, Ga. The computer system will be tied into an interactive database permitting show attendees to enter formulas with up to 10 components on line.

DYNAMIT NOBEL CHEMICALS' microelectronics group has introduced what it describes as the first commercially available organosilanes specifically designed for gold microlithography processing. The products are chelation-type materials which promote bonding between photoresists and gold substrates.

EASTMAN KODAK COMPANY'S Laboratory & Research Products Division has introduced eight enzymes in research sizes, ranging from 100 to 2,000 units, with colipase available in 500 and 50,000 units. The enzymes are: ascorbic acid oxidase, cholesterol esterase, colipase, creatinine iminohydrolase, diacetinase, L-x-glycerephosphate oxidase and lactate oxidase.

GENERAL ELECTRIC COMPANY has introduced several calcium-based chemicals, made to high-purity levels and in controlled particle sizes. The chemicals include calcium phosphate, calcium oxide, calcium pyrophosphate, calcium carbonate and calcium fluoride. The chemicals are suitable for specialized applications in the glass, crystal growing, oxide ceramic and plastic industries, GE says.

HOLLAND COLORS INC., a joint venture of Holland Colours Apeldoorn and ICC Industries Inc., will begin production of color pigments and pigment dispersions for the paint, plastic and printing ink industries. The company plans to start production at its Richmond, Ind., plant by the end of this year. All manufacturing was previously done by Holland Colours in the Netherlands.

REICHHOLD CHEMICALS INC. has introduced a high-strength polyester resin that is claimed to provide greater resistance to hydrolytic attack and improved toughness in fiberglass boat huls. The new resin, called "Hydrex," is offered by Reichhold's Reactive Polymers Division.

SHELL CHEMICAL COMPANY is opening an automated facility at its Dominguez Terminal in Carson, Calif., that will allow customer tank trucks 24-hour access to computerized loading. The company calls the facility a "breakthrough" in the bulk loading of industrial solvents.

STOLT-NIELSEN says the Norwegian shipowner Arne Blystad A/S, will participate in the parcel tanker fleet managed by Stolt-Nielsen, starting in January. Two ships, the Lake Anette and Dua Mar, will join the fleet in January, and Blystad has the option to add two more tankers. The addition of these ships will increase Stolt-Nielsen's parcel tanker pool to 43 ships.